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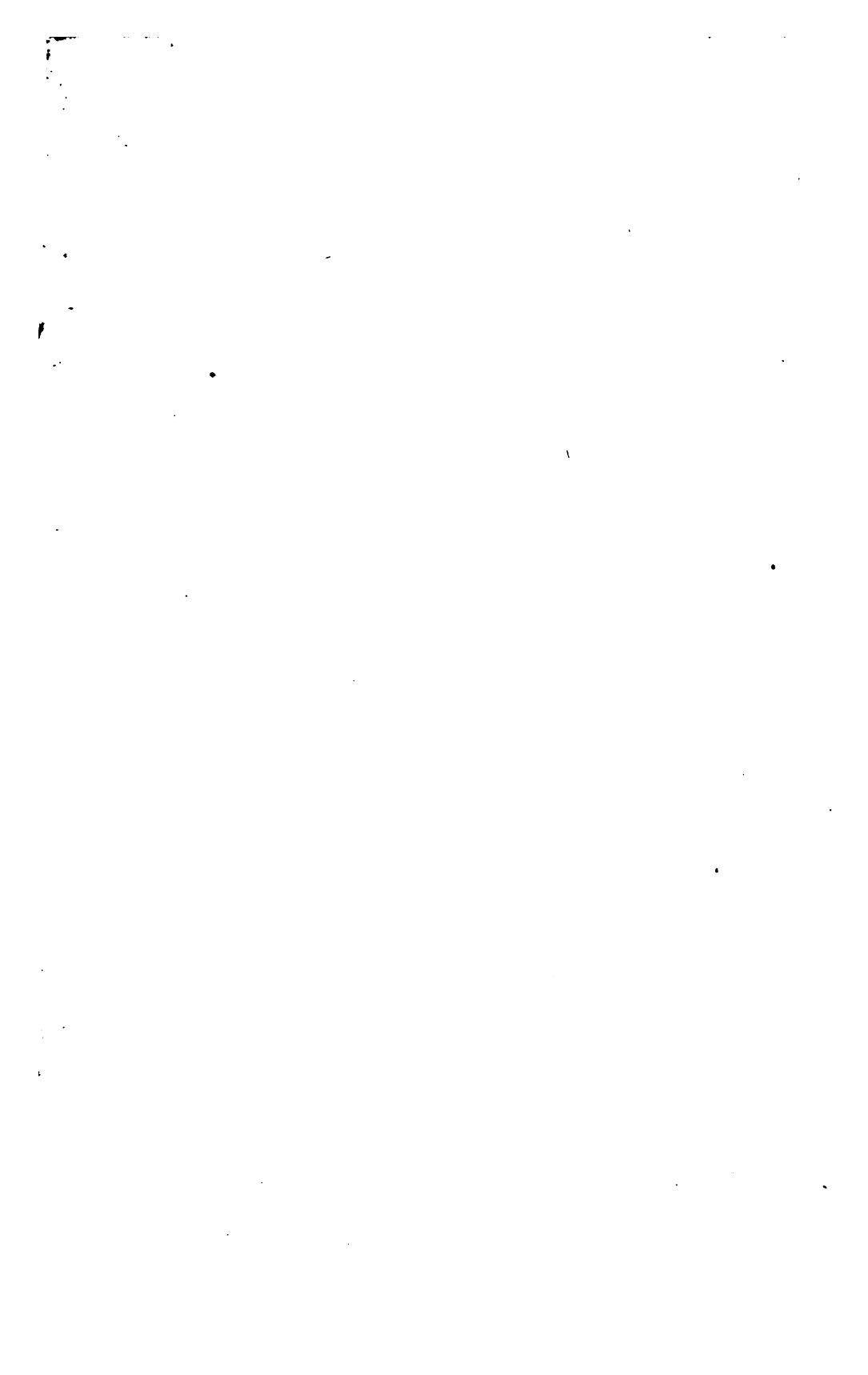
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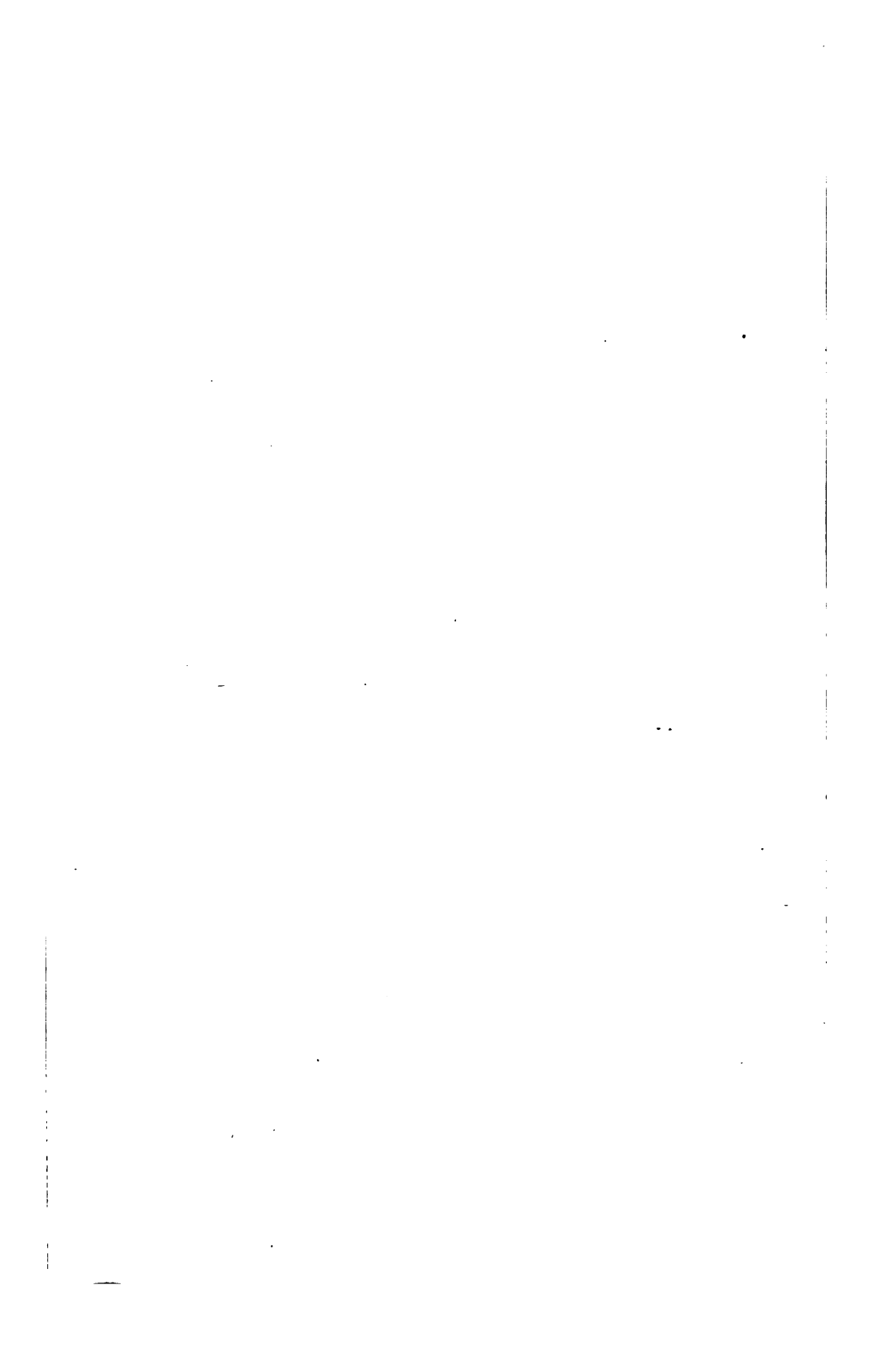
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A CASE OF DEFICIENCY OF THE CRANIAL BONES, Causing Interference with the Functions of the Heart, Lungs, and possibly of the Kidneys, in a Newly-born Child. By REYNOLD W. WILCOX, M. A., M. D., Instructor in Clinical Medicine at the New York Post-Graduate Medical School, Physician to the Demilt Dispensary, Assistant Physician to the New York Juvenile Asylum.

In July of last year I was called, in the absence of a colleague, to attend Mrs. B., already in labor. The patient although of a neurotic family had always enjoyed excellent health, her pregnancy (the first) having been marked only by a severe headache, during the first four months, the pain being chiefly at the vertex, uninfluenced by the weather, or time of day, and had gradually disappeared without treatment. No other symptom had been remarked or found after careful examination. The urine was free from abnormal constituents and was of good specific gravity and of sufficient quantity. The patient had suffered disagreeable sensations in the back for four hours previous to my arrival, and for the last hour had experienced severe pains, which recurred regularly every ten or twelve minutes; she was walking about, very excitable and extremely nervous. On examination I found a loaded rectum, the *os uteri* dilated to the size of a quarter dollar, the membranes projecting slightly at each pain. The rectum and lower bowel were then thoroughly emptied by enema, and a small dose of chloral was given to subdue the patient's ex-

citement. On my next examination the os was dilating gradually and becoming thinner. In the upper and left quadrant of the pelvis (the patient being in the dorsal position) a fontanelle was found. The angle formed by the edge of the cranial bones was nearly a right angle, one line running nearly vertically, the other almost horizontally, and while these lines could be traced from the walls to the pelvis in front and on one side, the other side or sides of this opening could not be reached. From the apex of this open space, a somewhat widely open suture ran obliquely downwards and backwards. By abdominal palpation the back of the fœtus was presumably to the left and in front; although the patient's restlessness rendered this part of the examination unsatisfactory. The foetal beat was heard distinctly just to the left of the umbilicus. Thus far the results of external and internal examination did not correspond; the internal examination seeming to indicate that the anterior fontanelle was in the position where the posterior one is usually found in normal labor. In the course of an hour the mystery was cleared up. The cervix was well dilated, so that a satisfactory examination was possible. In the upper and superior quadrant of the pelvis the fontanelle before found was discovered to be triangular, each side being about two inches long. Following the sagittal suture forward and backwards, the anterior fontanelle was found, somewhat larger than usual, but in the normal position. The sagittal suture was much shorter than usual. From the anterior angle of the anterior fontanelle ran an interfrontal suture, open to the root of the nose. Therefore the presentation was a head; the position, occiput, left, anterior,—the conditions being very open sutures, and an enormous posterior fontanelle. Considering that the head would be easily compressed, I predicted a rapid labor and difficulty in inducing the child to breathe. In half an hour the membranes had ruptured, the cervix had slipped over the head and the head itself, in two pains, was upon the floor of the pelvis. From this time till the birth of the child chloroform was administered intermittently. The head was born within three hours from the first pain; the pressure to which it had been subjected had overlapped the two parietal bones so much that the two fontanelles were much increased in size; the eyes were very protuberant (frog's eyes) and showed marked divergent strabismus; the face at the time of the birth was not cyanotic. The cord being clear, the upper hand, found pressed under the

chin, was swept over the breast and liberated. As the pains had ceased with the expulsion of the head, I immediately delivered the child by making traction with the finger hooked in the lower axilla. The mouth was cleared of mucus as soon as it was free. There was no cry, no heart impulse perceptible; the cyanosis which had developed during the process of extraction of the body disappeared after inflation of the lungs with a Ribemont tube, but no respiration followed. The cord had ceased to pulsate and it was cut and tied. The child was palid, pulseless and evidently did not breathe. During the next two hours the child was sprinkled with cold water; flagellated with towels dipped in ice water; artificial respiration, Sylvester's method, performed; was inverted, and finally put into a hot water bath and iced water poured on chest, the work being kept up incessantly and carefully. At last the child showed a faint respiration, and soon cried out feebly, and pulsation could be felt in the carotids. A neighboring physician now, at my request, continued the treatment while attention was turned to the mother, who by this time was almost unmanageable, pulse 100, very restless. The placenta was expressed, and a vaginal douche of corrosive sublimate solution ordered, with the usual after treatment.

Three hours after birth the child's respiration was 60, pulse very weak, but unmistakable. At the end of another hour, the respiration having become stronger, the child was removed from the bath and dressed. Six hours after birth it was applied to the breast and nursed fairly well. Examination of the vulva showed that no rupture of the perineum, nor indeed of the fourchette had taken place although the child was fully developed in all respects except the cranial bones, and was a full term child, the size being somewhat small. The mother made good recovery, no unusual symptoms supervening.

The next day the head was carefully examined and measured. The sagittal suture (from the posterior angle of the anterior to the anterior angle of the posterior fontanelle) measured one inch. The posterior fontanelle was in form very nearly an isosceles triangle, the angle between the two equal sides being nearly ninety degrees; the distance from the sagittal to the right lambdoidal suture was two and seven-eighths inches; from the sagittal to the left lambdoidal suture was three inches, the base of the triangle measuring three and one half inches. The free edge of

the occipital and both parietal bones were smooth and nearly straight. The scalp was freely movable over the brain, but nothing of the cerebral structure could be identified. When the head was raised and retained in the vertical position, the scalp bulged at the lowest (posterior) position as if some fluid was contained underneath it. Pressure with the hand stopped the respiration, slowed the heart, reducing the pulse from 120 to about 80; cyanosis came on in about two or three minutes and divergent strabismus. I did not experiment longer than that time. On placing the head upon a level with the body the same symptoms, but in a minor degree, supervened. There was also noticed an area of redness or rather bluish redness, irregular in outline, about the size of a quarter dollar over the upper lip and extending on the cheek on both sides of the nose. Direct pressure caused pallor as fully pronounced as in normal skin. During the day there were several attacks of deficient respiration, cyanosis, divergent strabismus with protrusion of the eyeballs, but these symptoms disappeared on raising the child up and sprinkling its face with cold water. During the night the child cried pretty constantly, the strabismus at such times being very marked. On the second day it was remarked that the child passed but little urine, and clots of blood were found upon the napkins. Inspection showed that the blood came through the urethra and from the bladder, which contained nothing but blood. The next day the child became very drowsy; no more urine, but an increase in the amount of clotted blood. Hot baths and hot sponges over the loins and bladder were ordered without much benefit. On the fourth day, however, the blood diminished and the urine reappeared. Although at no time could a sufficient amount of urine be obtained for examination; yet I believed it to be a case of uric acid infarction, and gave distilled water freely, in the hope of dissolving the uric acid. The child although well fed was emaciating rapidly. The drowsiness gradually disappeared. From the next day the child began to improve, and during the next four weeks did well. When six months old the posterior fontanelle had gradually closed in to about the half of its former size, while the anterior one was as it is usually found at that age. The child was apparently thriving.

This case is reported without physiological or pathological comments, to induce others to record similar ones, if they have been

observed. A careful search through all the literature that is accessible to me fails to discover a similar case.

New York City, May, 1886.

THE USE OF THE ELECTRO-MAGNET, for the removal of particles of Iron from the interior of the Eye; By A. D. WILLIAMS, M. D., of St. Louis.

In the more recent literature on eye surgery, numerous cases of removal of chips of iron from the interior of the eye are reported by various operators, by the use of the Electro-Magnet. The operation has great merit, and, in fact, is already established as a permanent operation in Ophthalmology.

In most cases where pieces of iron or steel penetrate the eye they lodge in the vitreous humor; the injury causes traumatic cataract very soon, so as to completely prevent all inspection of the interior of the eye, and consequently no knowledge of the location of the foreign body in the vitreous chamber can be obtained. Heretofore these cases were all hopeless and the balls had to be removed sooner or later. Now in a majority of these cases the chip of iron or steel can be "fished" out by means of an electro-magnet, the eye balls saved to the patient, and in some cases useful vision may remain. The vision is uniformly preserved when the foreign body is located in anterior part of the ball, as in the lens or iris, where it can be seen. In the latter condition the operation is very simple. A puncture is made in the cornea near its margin, in the most convenient place to reach the foreign body, and large enough to admit the end of the electro-magnet. The point of the magnet is then passed into the anterior chamber and made to touch the metal when it at once adheres and comes out with it. When the chip of iron is in the vitreous chamber, which is usually the case, the operation is more difficult and not so certain. A puncture, sufficiently large to admit easily the end of the magnet, is made in the sclerotic between the tendons of the external and inferior recti muscles, behind the ciliary body. The point of the magnet is then passed into the vitreous chamber and turned in different

directions in the hope that it will come close enough to the piece of iron to attract it and thus bring it out. If the first effort does not succeed another attempt is made in the same way and even a third effort is made. If that does not succeed, it is given up and the ball is at once enucleated. In recent cases and particularly when the metal can be seen so as to be located, the operation is much more likely to succeed. In old cases where nothing can be seen inside of the ball, more than half of the operations are successful. This operation has permanent place in eye surgery.

The after-treatment is simple, and consists in bandaging the eye and keeping the patient quiet. In the *Trans. of the American Ophthalm. Society for '85*, Dr. Knapp, of New York reports nine operations of this kind; In two cases the chip of metal was in the anterior chamber; both were removed and good vision in both preserved.

In the other seven cases the pieces of iron or steel were in the vitreous, and all invisible. In four of these cases the operations succeeded in catching the foreign bodies on the magnet, which brought them out. No vision in either case and none expected, as the interior of the eye in all cases where the metal has remained a considerable time is always disorganized. In the other three cases the magnet failed to catch the foreign bodies and the balls were at once removed.

In the same *Transactions* Dr. Jas. L. Minor, of Memphis, reports the successful removal of a piece of iron from the lens by the magnet, and afterwards the removal of the cataract. Fair amount of vision was obtained.

A DIAGNOSTIC PUZZLE. By LOUIS BAUER, M. D., M. R. C. S. (Eng.), Professor of Surgery in the St. Louis College of Physicians and Surgeons, of St. Louis, Mo.

The case concerns a gentleman now thirty-seven years old. His present weight is from 180 to 185 pounds, and it has remained at about these figures for the past twelve years.

About fifteen years ago, and without any known provocation, he was suddenly attacked by an intense pain in the right hypochondriac region. During nine successive years these attacks returned in periods varying from four to ten days. The paroxysm

would set in with full force and without any prodromata, the pains being always in the same locality—extending from the groin to the right testicle. They were attended with symptoms of collapse,—frequent and thready pulse, cold and clammy extremities, and general distress.

The ample means of the patient enabled him to employ the best physicians in this country; but all their efforts failed to alleviate his suffering. Strong drinks, and large doses of morphine administered hypodermically, were the only means found to be effective in cutting short the paroxysms and thus giving temporary relief, and upon them alone he relied for quite a number of years. During a trip to Europe he consulted prominent practitioners in London and Paris, and undertook by their advice a systematic course of the waters of Carlsbad and of Plombières. The results were no better than had been attained in this country.

On his return home he was induced to submit his case to Prof. Hammond, of New York. This gentleman pronounced his case neuralgia of the seventh and third lumbar musculocutaneous nerves, and proposed and performed their subcutaneous division.

Mirabile dictu, for a year after the operation the patient was entirely relieved. But at the expiration of this time the paroxysms returned with, if possible, increased severity and violence. About five years ago the patient placed his case in our hands.

Its obscure character rendered a consultation with our friend, Prof. Hazard, advisable. After a most thorough investigation we arrived at the diagnosis of

RENAL COLIC

caused, most probably, by a mechanical excitant in shape of a renal calculus. This conclusion was based principally upon the character and seat of the pain, and the apparent absence of any other lesions. No additional evidence was derived however from the quantity and quality of the urine—that being in every way normal.

We contented ourselves with advising the patient to drink large quantities of milk and carbonated fluids; to keep the bowels regular and to refrain from ardent liquors. He had been under our daily observation but six days when one of his accustomed attacks set in.

It presented all the features which had been so graphically described to us by our patient, took the usual course and yielded to the same agents as heretofore. On examination in the morning

after the paroxysm, we found a pretty heavy deposit of pus in the urine. This continued to be the case for the five consecutive days and then it ceased. Ever since this the patient has been entirely free from the paroxysms and for the past five years has enjoyed perfect health.

RETROSPECT.

If we may believe the patient (and I see no reason to doubt him) the appearance of pus in the urine on this occasion was an entirely new phenomenon. Most of his former medical attendants had paid close attention to his urine, but none had previously observed pus, or if so, had failed to make known the fact to the patient. This statement was afterward confirmed, so far as he was concerned, by Dr. Hammond. On microscopical examination of the urine we failed to discover any other abnormal feature.

Of course there must have been an abscess which evacuated its contents into the right renal pelvis or ureter. The most careful exploration had, however, failed to disclose its exact seat or size. That the proximate cause of the symptoms prevailing for so many years was at the foundation of the abscess, cannot be doubted; but that the latter itself was of recent origin is equally evident. We had no means of ascertaining the primitive cause and are left in the dark as to the diagnosis of the case. This much, however, is clear—that with the purulent discharge the disease forever vanished.

COCAINE POISONING—RECOVERY. By JNO. H. MCINTYRE, A. M., M. D., of St. Louis.

Notwithstanding the fact that a great deal has been said and written in regard to cocaine, yet we are not absolutely acquainted with all the subtle influences of this remarkable drug. I may therefore be pardoned for reporting the following case.

About May 15th, of the present year, I was hurriedly requested by Dr. A. B. Nichols of this city to assist him in the management of a case of poisoning by cocaine.

Upon my arrival, I found the patient, an intelligent gentleman, about 40, of full habit, weight about 160 pounds, short in stature, of nervous sanguine temperament, lying upon the floor of his office with his head supported by a chair cushion, a deathly pallor overspreading his countenance; pupils widely dilated;

conjunctiva insensible to touch; slow, labored (sighing) respiration; pulse 140 or more to the minute; inability to articulate; making frequent requests (by signs) for water which when taken into the mouth he spat out, as he was totally unable to swallow.

This condition was induced by a hypodermic injection of one-half a grain of cocaine, given twenty minutes before my arrival.

Dr. N. acquainted me with the fact that he had at divers times given him half and sometimes three fourths of a grain at a time, repeating the dose once in thirty minutes until as much as two grains had been given, if calmative effects were not produced; and he was greatly surprised to find toxic symptoms produced by this single dose, which was administered with the view of relieving the effects of one of his periodical sprees with which at numerous times he had succeeded admirably.

It is proper here to state that Dr. N. has had a large experience with this drug in alcoholic excesses and the consequent depression arising therefrom, and he emphatically states that its effect is to relieve the desire for liquor for a considerable length of time after its administration.

The treatment in this case consisted in the hypodermic administration of spts. ammo. aromat., morphia and brandy, which was given at frequent intervals. Gradual improvement occurred, though for a while things looked decidedly "grave."

At the end of four hours he was taken to his home in a carriage, and fourteen hours after the administration of the cocaine, "Richard was himself again."

ENUCLEATION OF THE EYEBALL UNDER COCAINE ALONE. By A. D.

WILLIAMS, M. D., of Saint Louis.

Some years ago I removed a number of eyes without the use of any anæsthetic, from grown persons. The operation, however, is too severe and I do not intend to repeat it; besides it is not necessary since cocaine has come into use. Some time since a young fellow about 15 years old, got one eye put out by a piece of iron, which cut clear through and lodged in the vitreous humor. The eye inflamed badly and became very painful and the young man concluded, on advice to that effect, to have it removed at once. I injected a few drops of a 4 per cent. solution of cocaine under

the conjunctiva in two or three places on opposite sides of the ball and proceeded to remove it. The patient knew an operation was going on, made some noise but held very still. I think I was justified in doing the operation in that way.

A few weeks since a man about 25 years old consulted me in regard to a blind eye, the result of sticking a fork into it, which was still tender to light and more or less irritable, but not painful. The injury had been received more than a year previously. In the mean time the good eye had become involved by sympathy, resulting in a dense false membrane in the pupil and complete synechia posterior. He had barely vision enough left to get about alone. I advised the removal of the injured eye to which he consented readily.

I dropped a 4 per cent. solution of cocaine into the eye several times and proceeded after a few minutes to enucleate the ball. Patient bore the operation quite well, complained of some pain when I lifted the different muscles, but the greatest pain came when I passed the scissors in to reach and cut the optic nerve. For a moment that part of the operation hurt severely. I omitted to say that as I cut the different muscles the assistant continued to drop the solution into the cuts. The severe pain, which occurred when I cut the optic nerve, showed that the medicine had not reached so deep down. Under cocaine this operation can be easily made without chloroform in grown persons. Last week two or three operations of the kind were reported in the Ophthalmological Section of the American Medical Association by different persons, whose names I do not now remember.

Clinical Reports from Private Practice.

MEAT JUICE IN THE TREATMENT OF TYPHOID FEVER AND WASTING DISEASE. BY FRANK L. JAMES, PH. D., M. D. of St. Louis.

In February of last year I was called to see Miss M. B., a maiden lady 25 years old, who was then in the third week of an attack of typhoid fever. She had been taken ill suddenly while on a visit to some friends in Illinois, some 50 miles from this city, and after suffering some three or four days there, insisted upon being removed to her home. Here she had the professional attention of a physician who occasionally attended the family, until he himself became ill, and I was called into the case. The disease was not of a violent type and the patient, under treatment became convalescent and was making a fairly rapid recovery when on the 24th day, just one week after my first visit, from some unexplained cause—some unknown imprudence, probably, the dysenteric discharge, which up to that time had been quite under control, assumed a violent form. From two or three stools a day it rose to twelve on the first and ten on the second day of the exacerbation. Epistaxis, which had occurred occasionally during the earlier stages of the disease, but which for ten days or more had entirely ceased, also reappeared, and the patient's condition became very alarming. Her strength, already much impaired, rapidly failed and in the course of a few hours she was reduced to a pitiable condition.

The dysentery was met with opium and iodoformed charcoal (1) and the epistaxis by ergotine hypodermically injected; but the real problem—that of maintaining the patient's strength, was a more difficult matter. Stimulants in the shape of egg-nogg, cream punch, etc., had become distasteful, and were used only under persuasion amounting almost to compulsion. During the course of the disease resort had been had to the various forms of concentrated food. Beef extracts, beef teas, beef and chicken broths and peptones (the latter freshly prepared by the writer) had been given until the patient had become tired of them. Her gorge arose at the mere mention of the name of peptone.

In this dilemma, casting about for some form of concentrated animal food not yet used, I concluded to try Valentine's Meat

Juice. Without telling the patient the nature of the food, it was administered to her in doses of 30 minims every one-and-a-half or two hours, diluted sometimes with milk and sometimes with water. The juice was well borne—not merely tolerated—the patient declaring that it “tasted good.” During the first two days of its use it was given tepid, or at a temperature of about 120° F., but after that it was mixed with cold water, the patient relishing the change. At this time, also, the dose was increased to one teaspoonful given every three hours.

The result was in every way satisfactory. As soon as the dysentery was checked (which was on the third day after its sudden outbreak), the convalescence, so rudely interrupted, recommenced and progressed, though very slowly, to complete recovery.

For six days the patient received no nourishment whatever, save that derived from the meat juice and the small amount of milk given with it. Every other form of meat extract was refused with loathing. During the long and tedious convalescence the patient used from three to five drams of the juice per diem, consuming a dozen bottles of it altogether, and up to the last dose of it declared that she really relished it.

In another case—epithelioma of the tongue, preventing the use of solid foods, the strength of the patient was maintained for many weeks almost wholly by the use of Valentine's Meat Juice, and in conclusion I can say, without any disparagement of other concentrated meat foods, that in all forms of wasting disease it is simply invaluable. The only drawback attendant upon its use is its great cost; and if its manufacturers can only manage to cheapen the methods of production without deterioration of the product, they will confer a great service not only upon the sick and suffering, but upon those who have them to nurse and take care of.

NOTE.—Iodoformed charcoal, introduced by Bouchard to prevent putrefaction in the digestive tube during typhoid and kindred diseases, is prepared as follows: Dissolve 10 grains of iodoform in 3½ ounces of sulphuric ether and stir into the solution 2¼ ounces of pulverized vegetable charcoal. The mixture is made as thorough as possible, and the ether is then allowed to evaporate, leaving the charcoal completely iodoformized, the iodoform being in a state of the minutest subdivision. Finally the charcoal is mixed with 5½ fluid ounces of glycerine and the mixture administered in doses of a half ounce in a wine glass of water every two hours.

F. L. J.

Correspondence.

ST. MARY'S HOSPITAL, NEW YORK.

EDITORS JOURNAL:

This handsome four-story building is situated on Thirty-Fourth Street near Ninth Avenue. Dr. Poore is the Superintendent-in-Chief, and through his invitation I had the pleasure of going through the building. This is a fine hospital, and is in charge of the Sisterhood. On the first floor are the parlors and officers of the institution. The second floor contains two wards for girls, each containing about fifteen or twenty handsome iron cribs, with brass finishings, and tray on which the meals of the children, who are unable to be up are served. These trays hold at other times the books, dolls, etc., of which there is an abundance, with which the little ones amuse themselves. All but one of the girls seemed content and happy, and she was too sick to care for any thing. The third floor contains the two wards for boys, and the furniture was the same as the ones below, with this exception, that dolls gave place to drums, of which instrument of torture I saw not less than seven or eight on a table at one and the same time. Each of these floors have a playroom, and these in turn have various playthings for the little ones, from the rubber ball up to the full fledged doll house, with all modern improvements. The fourth floor contains the isolating wards, of which there are two, and very bright, nice rooms they are. This floor has the operating room in the northeast corner of the building, and is lighted by windows on the east and north sides and by a large skylight from above. This room is furnished with all the appertenances of first-class antiseptic operating rooms. Here I saw Dr. Poore make an operation for the removal of enlarged glands from the neck, and two for necrosis, one of the ulna and the other of one of the metatarsi. In the operation on the ulna he used his celebrated osteotomes, and they are very efficient. The last he had made are about nine inches long, so as to afford a good handle and sufficient leverage to work them loose readily. They are tapered down from a distance of about six inches from cutting edge, thus making the bevel very gradual and not tapered more

in one place than another, so that the flat surface represents a straight plain. The temper is between that for a cold chisel and a cutting tool. A saw with which the doctor had been operating for five years, and it had never been sharpened yet, was in condition for one to trim the finger nails with. For drainage the doctor used antiseptics, horse hair, sutures of cat-gut; and the antiseptics used are iodoform, carbolic acid and corrosive sublimate. The interior of the house is finished in the natural wood, polished and oiled; the floors are treated in the same manner. Dr. Poore informed me that he could control scarlet fever, diphtheria, etc, but when one child got the measles then they had an epidemic, and all took the disease in turn.

H. H.

PRACTICAL NOTES.

ERYTHEMA AND IRRITATION of the skin may be easily allayed by applying a mixture composed of equal parts of lanolin and vaselin. One application of this mixture will generally suffice to allay the trouble.

O-D.

ACUMINATED WARTS are often observed upon the genitalia, more often in the sulcus right behind the glans penis in the male. Whilst they are harmless, from a cosmetic point of view, they are best removed, and to do this effectually one of the best methods is to apply chromic acid to them, or snip them off with scissors and apply the acid to the base.

O-D.

HAIRS THAT BREAK OFF near the skin, and which are accompanied by more or less itching, are not only diseased but, as a rule the trouble will be found to be parasitic. Extract some of the hair and the vegetable parasite will be found,—generally the trichophyton.

O-D.

SUMMER ITCH will probably be the next pruritic disease. Winter itch has had full swing for a number of years, and justly too, being caused by the sudden drops in temperature during the winter months. Lately I have found a sudden rise in temperature produce about the same result. The itching is excessive and distressing, but not very difficult to relieve.

O-D.

LACTIC ACID, which was so highly praised by Moosetig-Mohrhof, is now said by some to be valueless, whilst others support Mohrhof's claims to its value in the treatment of neoplastic diseases of the skin. The only way left now is for each one to satisfy himself, by experiment, as to which claim is the correct one. O-D.

SCABIES it appears is increasing in this country, although at a rather slow rate. After the close of the last war the percentage of cases fell a great deal, the absolute number of cases being quite small. Of late it has again increased somewhat chiefly by foreign accessions. It is chiefly in the larger seaport towns that any increase has been noted. O-D.

CONVULSIONS may frequently be cut short, like magic, by turning the patient on his left side. The nausea as an after effect of chloroform or other narcosis may generally be controlled in the same manner.

BINIODIDE OF MERCURY is insoluble in vaselin, but dissolves in 200 parts of lard or 50 parts of castor oil—a fact which should be remembered in prescribing it for inunction.

THE TENESMUS of dysentery or diarrhoeas, or the vesical tenesmus of cystitis, may be very much relieved by placing a pillow under the buttocks and making the patient lie upon his back in such a manner that the parts are thus raised somewhat higher than the other portions of the body.

THE REDUCTION OF INGUINAL HERNIA is very much facilitated by the hypodermic injection of a full dose of morphine in the immediate neighborhood of the lesion, before resorting to taxis. The effects of the injection are decrease of tension in the tumor and relaxation of the abdominal muscles, besides a diminution of pain.

FOREIGN BODIES in the ear may generally be easily removed by one of the following devices: Loop a horse-hair—a good, stiff one from the tail is best, and twist it around in the canal. If the object be rough it will generally catch in the loop. If this fail, and the object be smooth—like a pebble, a grain of corn or a bean, try the following: take a round bit of wash leather or stiff kid $\frac{1}{4}$ inch in diameter, and thrust a threaded needle through it from the smooth side; knot the thread and cut it off close to the knot, so that you have, in miniature, one of those “suckers” with which

as a boy you amused yourself by lifting smooth pebbles. Smear on the under or smooth side of the leather a little liquid glue or quick drying cement of any sort, and then introduce your sucker into the canal and leave it in contact with the object to be removed until the cement takes hold. The balance suggests itself.

F. L. J.

Editorial Department.

FRANK L. JAMES, PH. D., M. D. and A.H.OHMANN-DUMESNIL,
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Mo.

With the present number Drs. Frank L. James and A. H. Ohmann-Dumesnil, long and favorably known to its readers, became identified with the undersigned in the proprietorship of the JOURNAL.

FRANK M. RUMBOLD. M.D.

VOLUME FIFTY ONE.

With the present number the ST. LOUIS MEDICAL AND SURGICAL JOURNAL enters its 51st volume. As becomes an individual or an institution that reaches an important epoch or land-mark in its career, we have taken occasion to mark the event by appearing in an entirely new dress and with certain changes in the general makeup that will be readily recognized by the readers and friends who in past years have followed us through the various vicissitudes

which go to make up the existence of men and magazines.

The names which appear for the first time at the head of the Editorial Department are not new ones, or unknown to our readers. For years past they have contributed to the JOURNAL in an editorial capacity, and the present announcement but marks the fact of their closer identification with its business interests. We sincerely hope that the favor with which their work has been met in the past, will be extended to the future, and that the kindly feelings existing between the JOURNAL, its patrons and its medical cotemporaries, and which marked the close of its first half century of volumes, may continue for many years to come. We certainly shall not relax our endeavors to please, and shall spare no pains to merit the success to which we so confidently look forward.

In conclusion we would say that arrangements have been completed by which the delays of the past have been obviated, and that hereafter our patrons will be served with their JOURNAL promptly and regularly on the 3rd day of each month.

A NEW DISCOVERY.

It has been a matter of observation that some patients, suffering from pronounced inflammatory disorders of the gastro-intestinal canal, continued fevers, so-called bilious fever, and other maladies of a similar nature, have evinced a marked sleepiness, amounting sometimes to torpor or even to coma. The explanation of this phenomenon has been relegated to the domain of cerebral diseases, some form of brain involvement being called in to explain the excessive drowsiness, or more marked symptoms, alluded to above.

Dr. Geo. J. Bernays, of this city, wishes to call attention to what he considers the only true and scientific explanation of this fact, and one which is in accord with clinical observation. He contends, and justly too, we think, that on account of the great degree of heat developed in the stomach in the condition mentioned above, a certain amount of chemical decomposition takes place and chloride or formyl or chloroform is one of the products

of this chemical action. This chloroform is absorbed by the walls of the stomach, whilst still in a nascent state, and also by the pharyngeal mucous membrane, on its way to the outer air. It is thrown off by the patient who immediately inspires it, and, by that means, absorbs another portion of it. It will be seen that, in this manner, the patient is living constantly in an atmosphere of chloroform, furnished by himself, and, on account of its being constantly absorbed, he is continually in a drowsy condition which may become one of torpor or even of coma.

The formation of quite large amounts of gases has been observed, notably of hydrogen, where the breath of a patient could be lighted nearly one yard from the mouth and it would continue to burn for quite a time.

The chloroform is formed in patients of all ages, but more often in those whose ages vary from five to fifteen. The temperature is always high, and when the patient is approached the peculiar odor of the exhalation is clearly perceived and recognized as that of chloroform.

As soon as opportunity offers, Dr. G. J. Bernays will have some of this exhaled, and re-inhaled gas examined by a competent chemist, and its analysis made in order to determine absolutely whether it is chloroform or not. In the meantime, we think that the discovery is an important one, both from a pathological and clinical point of view. Not only this, but it is also valuable as furnishing a therapeutic solution of the treatment to be employed in such cases.

Medical Progress.

THERAPEUTICS.

GUACHAMACA TOXIFERA has been examined by Robert (of Strasbourg) with the result of proving, to his own satisfaction at least, that this Central and South American plant is the true source of curare, or Indian arrow-poison. Dr. Robert in this simply confirms the statement of Schiffer, made in 1883. The latter extracted from guachamaca, which is one of the *apocynaceæ*, a very

active alkaloidal poison which he called guachamanine, but which according to his own statements, appeared to be identical with curarine.

LACTIC ACID AS AN ESCHAROTIC.—"Up like a rocket and down like a stick" seems to be the rule with most of the new additions to therapeutics, and the "dull, heavy thud" of the fall of the stick seems to be in exact ratio to the pretensions of the new wonderworkers—the louder and more pretentious the claims of the candidate, the duller and heavier and 'thudder' it hits the ground. Drs. Spitzer and Hermann, have just communicated to the *Wiener Med. Blätter*, a series of experiments made by them in the Vienna Hospitals with lactic acid as an escharotic, and their report is exactly what we might expect under the foregoing rule. Heralded as almost a sentient thing that beneficently ate up and destroyed all noxious and diseased elements, causing no pain and sparing the healthy living tissues, these gentlemen declare it to be an uncertain and slow-acting escharotic, attacking, like all of its kind, the healthy and diseased tissues with equal force, and causing quite as much pain as chloride of zinc or potassium hydrate. As compared with the two last, the treatment with lactic acid lasts longer and is not so effective.

SUPPOSITORIES FOR VAGINITIS. Most excellent results have been obtained in specific as well as non-specific vaginitis by the use of the following.

℞ Solid Copaiba

Butter of Cacao, of each, ʒ4.

Extract of opium..... gr. 1.

Make into a suppository. To be inserted at bedtime. In the morning rinse the vagina with tepid water in each quart of which is dissolved one ounce of boracic acid.

REMOVAL OF TAPE-WORM.—As the result of many years experience in Marine Hospitals, during which time he has successfully treated 2,782 cases, Dr. Bérenger Ferrand declares that of all the taenicides, from calomel to turpentine, through the whole alphabetical list of vermifuges, none can compare for certainty and safety with the bark of pomegranate root, or rather its alkaloid, pelletierine. The latter is preferable, since the value of the bark depends entirely upon its contents of this principle. But pelletierine, certain though it be when used properly, fails like all

the balance when the proper precautions are not rigidly adhered to. The following is an abstract of Dr. Férrand's method of exhibiting it. Learn first whether your patient be easy or difficult of purgation. This is an important point, as will be seen subsequently, since the dose of pelletierine and of the accompanying purgative must be determined by his habit in this respect. On the evening previous to the exhibition of the remedy the patient is put upon a light diet, consisting of milk with the addition of bread or rice only. He is instructed to remain in bed in the morning, and at 6 o'clock he is given an infusion of senna. The dose in ordinary cases is from $2\frac{1}{2}$ to 4 drams of the leaves infused in 3 ounces of water, to which is added, as a corrigérant, a half ounce of any syrup. At 7 o'clock he is given one half of the dose of pelletierine, which consists of two-thirds of a grain of the alkaloid dissolved in syrup of orange peel. He is now instructed to lie down upon his back, perfectly quiet, with his eyes closed. By this means griping and vomiting are generally avoided. At the end of half an hour the balance of the pelletierine is administered, with the same instructions as to remaining quiet. At 8 o'clock, providing there is no nausea, griping or vomiting, a full dose (from 6 to 10 drams) of castor oil is given, either raw or in emulsion. If there is nausea, griping or vomiting, the oil must be delayed for another quarter or half an hour, but not longer. The oil must be administered within a half hour after the last dose of pelletierine. The patient should continue to lie in bed until all the nervous disturbances which are almost certain to follow the pelletierine have subsided. He must also be instructed to refrain from going to stool as long as possible after the first symptoms of catharsis appear. If on the contrary, the senna and oil fail to produce catharsis within a reasonable time after administration, a clyster of salts and senna (1 ounce of the leaves to 5 ounces of hot water, to which is added 10 drams of Glauber salts dissolved in 3 ounces of water) should be given. If, after commencing to pass away, the bowels should cease acting while a portion of the worm still remains in the intestines, traction must not be resorted to. A second or even a third clyster must be given. These last injections may consist of warm infusion of pomegranate root or a warm solution of Glauber salts. The vessel over which the patient sits should be half filled with warm water. Should the worm not make its appearance in the first stool, the clyster must be repeated as directed in the foregoing paragraph. The difficulties in the

way of uniform success are the appearance of vomiting after taking the first dose of pelletierine, and insufficient purgation. As a general rule the best results are achieved when the purgation is rapid and active. If, after all precautions and attention to detail, the worm is not passed, the doctor recommends that at least a month be allowed to elapse before another attempt is made. If tried sooner the disappointment is almost sure to be duplicated.

OIL OF EUCALYPTUS IN MALARIAL AFFECTIONS.—Dr. J. H. Musser of Philadelphia, writes to the *Therapeutic Gazette* detailing a series of experiments and studies made with oil of eucalyptus in malarial complaints. His conclusions are summarized as follows: 1. That the oil of eucalyptus is of decided value in about thirty-three and one-third per cent. of all cases of intermitting malarial fever. 2. That it has no specific value in any one type of the disease. 3. That the longer the duration of the disease the less liable is it to do good. 4. That relapses are not prevented by it. 5. That its influence on the spleen has not been demonstrated. 6. That a dose of ten drops four times daily has been a sufficient dose, but that five drops every three hours would be of greater value, possibly. 7. That good results are not attained as quickly as by large doses of quinine, but that a good effect should be observed within five days at least.

KAVA RESIN.—Dr. Randolph, who communicates to the *Medical News*, of Philadelphia, his experiences with kava resin, or the resinoid body obtained by Lewin from the roots of the kava plant of the Samoan Islands, states that the results obtained by him confirm in the main the statement of Lewin, though they were not so favorable as those reported by the latter. He predicts an useful future for the drug, especially in the therapeutics of gonorrhœa, and suggests that the resin be called after its discoverer *lewanin*, instead of alpha kawa resin, as proposed by Lewin.

HYDRASTIS CANADENSIS has been recently under discussion by the Imperial Academy of Medicine of Vienna, upon a report made by Dr. Fellner who has carried out a most exhaustive series of experiments with the drug upon various warm-blooded animals. Fellner reports that hydrastis produces the same effects as ergot, not only as an oxytocic but as a hæmostatic. Where there is active hæmorrhage he prefers ergot, but in metrorrhagias, menorrhagias,

dysmenorrhœas, endo and para-metrites, fibromas, etc., he gives the preference to hydrastis. Of the alkaloids and salts of hydrastis he recommends most highly the phosphate of berberine, which may be administered in doses of from $\frac{1}{8}$ to $\frac{3}{8}$ of a grain.

PHYSIOLOGICAL AND PATHOLOGICAL.

PARASITIC ETIOLOGY OF DYSENTERY.—In the *Revista International di Med. e Chirurg.* Doctors Condorelli Mangeri and Arada publish ed a *nota preventiva*, concerning their researches into the causation and progress of a violent epidemic of dysentery which broke out in Catania last June, and persisted for several months. They have determined almost beyond a doubt (so they state) that the disease was caused and propagated by a specific bacillus, hitherto undescribed. With pure cultures of this organism they were enabled to reproduce the disease in guinea-pigs, rabbits, etc. The bacillus in question presents under the microscope the appearance of long filaments, disposed *en chaîne*, and of a glistening yellowish white color. The authors promise full reports at an early day.

THE EYE IN INTERSTITIAL NEPHRITIS.—At the May séance of the Société des Sciences Médicales de Lyon, M. Bouveret presented the eyes of a patient afflicted with interstitial nephritis, and who had succumbed to a cerebral œdema. During life ophthalmological examination showed that both optic papillæ presented appearances of œdema very similar to that of the disc in encephalic tumors, viz: disappearance of the contour and bulging of the disc into the retinal plane, effacement of vessels, minute hæmorrhagic centers, etc. The autopsy disclosed the same ocular phenomena; the kidneys were atrophied and granular; the heart hypertrophied and the brain very œdematous. The speaker (M. Bouveret) called the attention of the Society to the fact that at a preceding séance (January, 1886) he had presented the eyes of another patient who had also died of cerebral œdema consequent upon interstitial nephritis, and the specimens exhibited the identical papillary appearances here so well marked. On that occasion he had diagnosed cerebral tumor. These facts are very significant and should serve to resolve the problem of the pathogeny of the choked disc of encephalic tumors. They tend to show that cerebral œdema, so frequent in cases of cephalic neoplasms, is an in-

dispensable intermediary between the neoplasm and the strangulated disc—a theory proposed many years ago by Parinaud.

A NEW FUNGUS IN SALIVA.—M. Galippe has announced the discovery in human saliva of the mycelium and spores of a hitherto undescribed fungus, neither a *pencilium* nor *aspergillus*. He calls it *monilia sputicola* and promises soon to give its life-history, etc.

A SINGULAR FACT in regard to the toxic alkaloids of normal urine has been determined by M. Chibret, and by him communicated to the Academy of Sciences. As the result of a vast number of examinations, he finds that the urine passed eight hours after awakening contains more than five times the quantity of toxic alkaloidal matter contained in urine passed at any other time of the day. This result confirms in a remarkable manner the experiments of Dr. Bouchard upon the maximum toxicity of urine.

DEMONSTRATION OF THE LEUCOMAINES IN URINE.—The classic iodo-iodide reagent of Bouchardat (iodine 1 part, potassium iodide 2 parts, distilled water 50 parts) will, as recently pointed out by MM. Chibret and Izarn, demonstrate the presence of fortuitous alkaloids in normal or pathological urine, if the following precautions are taken:

1st. The urine should be cooled down close to the freezing point of water. A specimen of urine, which when freshly passed and tested at the normal temperature, gave absolutely no reaction, when again tested, a few minutes later, and cooled down to 40 ° F., instantly showed the green fluorescence indicative of the presence of leucomaines.

2nd. The tube containing the urine should be held against a dark or black background and the light concentrated upon it. A beam sent from a strong lamp through an achromatic condenser is excellent, but direct sunlight, sent through the tube in the same manner, is far better.

While the formula of Bouchardat, as given above, will demonstrate very minute quantities of alkaloids, the modification suggested by Chibret and Izarn is far more delicate. These gentlemen after numerous experiments, detailed in a paper read before the Académie des Sciences (séance of June 2nd,) and published

in the Bulletin of the Académie, found that a solution containing 8 parts of iodine and 10 parts of potassium iodide to 10 parts of water, would give a marked reaction in a specimen of normal urine diluted with 20 volumes of water. The ordinary iodo-iodide reagent failed to show a reaction when the dilution was carried beyond 3 volumes. To illustrate the exquisite delicacy of the modified reagent, a check solution of one part of hydrochlorate of morphine in 50,000 parts of water (or 1 grain to 104 ounces) gave a marked and distinct reaction.

OBSTETRICS AND GYNÆCOLOGY.

VAGINAL HYSTERECTOMY FOR CANCER OF THE NECK OF THE UTERUS.—M. Terrier at the séance of June 2nd, of the Société de Chirurgie, thus described his operation:

The uterus is brought down and an incision made, first in the anterior and next in the posterior cul-de-sac, just large enough to pass the finger in below the broad ligament. Three ligatures *en chaîne* are placed upon the left and an equal number upon the right broad ligament, after which three serrefines with long jaws were placed upon the left broad ligament which was bleeding freely. No vaginal sutures were made and no drainage established, the vagina being filled with iodoform tampons. There was no rise of temperature and the serrefines were removed in 48 hours. The tumor proved to be a lobulated pavementary epithelioma. The patient made a good and rapid recovery. Two patients operated upon in 1885, in an exactly similar manner, are now, after 11 and 6 months respectively, doing well and apparently in perfect health. In the present instance, from the result of microscopical examination, there is reason to fear an early return of the malady.

Department of Microscopy.

CONDUCTED BY

FRANK L. JAMES, Ph. D., M. D., President of the St. Louis
Society of Microscopists of St. Louis.

FAILURES WITH ZINC CEMENT—E. W. Claypole, of Akron, O., writing to the *American Monthly Microscopical Journal*, says that having had good results with white zinc cement purchased from a dealer several years ago, he recently undertook to make some for himself, and the product was a dismal failure—air bubbles forming around the edges of cells made with it and ruining the mounts thus made. He also states that cement had no adhesive properties and was easily wiped off the slips after it dried. He gives no details as to his method of making the cement and mentions but one of the ingredients (i. e. benzol), leaving the inference that he ascribes his failure to this particular one. The probability is, however, that the cause of failure was not the benzol but the zinc oxide. Had he have taken the precaution to heat this thoroughly in a muffle long enough to drive off the superfluous moisture and imprisoned gases, his cement would have been, in all probability, all right. Years ago, when I first commenced to make and use the zinc cement, I occasionally met with the same obstacle; but it has never occurred since I have taken the precaution to see that my zinc was perfectly dry before using it. In the chapter on Technology in the current number of the JOURNAL will be found a formula for a zinc cement that gives universal satisfaction.

AMERICAN SOCIETY OF MICROSCOPISTS.

As heretofore announced, the Ninth Annual Meeting of this Society will be held at Chataqua Lake on August 10th, and will continue for five days. Everybody knows Chataqua, and the only thing that suggests a possible drawback to the pleasure of

the occasion is the fact that the place of meeting is *too* popular. However, the managers of the hotels have promised plenty of accommodations for all who come, and we hope that no one will be deterred from attendance by the fear of overcrowding. A more delightful place, naturally, could scarcely have been chosen, as is well remarked by Mr. E. H. Griffith, Superintendent of the Working Session, in his circular letter to members of the Society. Situated on the borders of a beautiful lake, free from the noise and confusion, the smoke and dust of great cities, it is a place where the weary may rest, and the busy professional man can get a breathing spell in contact with Mother Nature. The programme of proceedings has not yet been perfected, but will appear in our August number, in plenty of time for those of our readers who propose attending the meeting.

ELEMENTARY MICROSCOPICAL TECHNOLOGY.

IX. PREPARATION OF THE SLIP.—CEMENTS.

We have now arrived at a point in our progress toward a completed slide where we must leave for awhile, the material to be mounted, and turn our attention to the preparation of the glass slip which is to receive the same and preserve it for future examination and reference.

§ LI. Every perfect mount consists, or should consist, of five parts, viz: The slip, or glass plate; the cell wall, or wall of cement surrounding the object and retaining the mounting material; the object; the mounting medium, and the cover-glass. The proper union of these elements constitutes the *slide*. The materials requisite for a slide, beside the object to be mounted, therefore are: glass slips, cover glasses, cements and mounting media. We will consider them in detail:

§ LII. GLASS SLIPS.—Formerly there was no uniformity in the size or shape of these, every microscopist having them cut to suit the stage of his instrument, the size of his cabinet, or as fancy dictated. Every manufacturer of microscopical accessories and materials followed his own inclination in the matter. The Germans, generally, affected a nearly square rectangle, some two

inches long by one and three-quarters broad. The French sent three sizes into the market, the smallest 0.5'' wide by 2''.25 long, and the largest 1''.10 wide by 3''.10 long. Of late years, however, since the study of microscopy has become so widely extended, and especially since the establishment of postal microscopical clubs and exchanges, the profession has settled upon an uniform slip, one inch wide by three inches long. This should be of the best and clearest glass, entirely free from bubbles and flaws. The edges should be ground, not merely for the sake of appearance, but because when left unground they scratch and disfigure the stage of the microscope and sometimes cut the hands of those who handle them. Such slips were formerly quite costly, but the increased demand for them has induced manufacturers to devise methods for their rapid production, and the best ground and polished slips of Chance's glass can now be bought for the price charged for plain (unground) ones five or six years ago.

§ LIII. These slips, as they usually come from the dealer, are greasy and unfit for immediate use. The most expeditious method of cleaning them, where a fire is convenient, is as follows: Put them in the bottom of a clean saucepan and pour over them some concentrated lye or liquor potassæ, cover with cold water and set on the fire to boil. After they have boiled for a short time, remove from the fire, let cool, pour off the dirty water, rinse with clear water and wipe dry with a clean cloth. After the slips are wiped they should be wrapped in packages of one dozen, in clean, soft paper and kept in a tight box where dust cannot get to them. This latter precaution is necessary in cities where the air is constantly full of minute particles of silicious sand and dust, which soon dull the polish of the surface of the slips.

Another method of cleaning is to immerse the slides for twenty-four to forty-eight hours in a solution consisting of four ounces of bichromate of potassium dissolved in a pint of water, to which has been added four ounces of commercial sulphuric acid. This solution (which is the ordinary battery fluid) is also most excellent for cleaning cover-glasses. Many workers immerse their slips and cover-glasses in this fluid and leave them there until they are wanted for use.

§ LIV. COVER-GLASSES--These are circular or square pieces

of very thin, clear glass purchasable of dealers in microscopical supplies, in four grades and six sizes, running from $\frac{1}{2}$ up to 1 inch in diameter. The grades are determined by the thickness of the glass, No. 0, the thinnest, being from $\frac{1}{200}$ " to $\frac{1}{300}$ " in thickness; No. 1 from $\frac{1}{200}$ " to $\frac{1}{150}$ "; No. 2, from $\frac{1}{150}$ " to $\frac{1}{100}$ ", and No. 3, from $\frac{1}{100}$ " to $\frac{1}{50}$ ".

Square cover-glasses, while convenient for temporary balsam mounts, are neither so sightly nor convenient for permanent ones, and though formerly much affected are now but rarely used, even in Germany, whose microscopists have until very recently refused to avail themselves of those time and labor saving accessories, the microtome and turntable.

The cover-glass may also be bought in plates and cut by the microscopist to suit himself. The labor of cutting is very much lightened and simplified by an ingenious little device for the purpose sold by all dealers in accessories. The price of the cut covers is, however, so reasonable (from \$1.50 to \$3.00 per ounce, according to thinness) that it will scarcely pay anyone to cut them himself, unless he uses a very large number, or wishes odd sizes.

Cover-glasses should be cleaned, as suggested above, by immersing them for two or three days in the chromate solution, after which they should be rinsed and then deposited in absolute alcohol, where they should remain until required for use.

§ LV. THE CELL.—In mounting very thin sections or very minute objects, when Canada balsam, damar or a similar preservative medium is used, a cell wall is not an absolute necessity; nor is it essential even, that the edges of the cover-glass should be sealed and finished with any cementing material, since the mounting medium itself dries hard and impervious at all points exposed to the atmosphere. The appearance, however, and the absolute durability of the mount are always improved by such a finish. It is therefore best to use it in all cases where the mount is intended to be permanent.

When the object to be mounted is of any appreciable thickness, or when it is excessively fragile and liable to be crushed by the pressure exerted by the natural contraction of the mounting medium in drying, the case is different, and whatsoever medium be employed, a cell wall, for the support of the edges of

the cover-glass, becomes an absolute necessity. The reasons for this must be patent to anyone who has ever given the subject a moment's thought. When a supporting wall is not used the object itself must sustain the cover-glass until the mounting medium dries sufficiently hard to perform this function. As the medium shrinks in drying—the amount of shrinkage depending upon the amount of volatile matter contained in it—undue pressure is gradually brought to bear upon both the object and the cover-glass. The result of this pressure is, frequently, distortion of the histological elements, or even crushing of the object (as in the case of delicate frustules of the larger diatoms) and a curving of the cover-glass, which renders it peculiarly liable to fracture by the slightest external pressure. So marked is this distortion of the cover-glass, in many instances, that it absolutely assumes a lenticular shape. In the older text books on microscopical technique various devices were suggested for the avoidance of such contretemps—though, strange to say, the true reason for the distortion seems to have escaped all writers upon the subject. Chief of these ancient devices formerly in vogue, were cells made of different thicknesses of paper, cut or punched out by hand. The introduction of round cover-glasses and the turntable now enable the microscopist to make perfectly uniform cell walls of any desired depth; though as we shall see later on, cells made of wax, india rubber, celuloid and of metal, still play an important part in mounting objects of any considerable thickness, especially for direct examination.

§ LVI. CEMENTS—A good cement should have the following qualities, the importance of which is in the order named:

1. It should not be soluble in the mounting medium, even in the slightest degree.
2. It should attach itself firmly to glass and should dry hard and quickly.
3. It should be tough and not become brittle with age.
4. It should flow freely from the pencil, and not have a tendency to become 'ridgy' or to run.
5. It should shrink but slightly, or not at all, in drying.

To these we may add that it should keep well in a liquid form, and not alter or deteriorate with age.

From these points it is plain that the ideal cement, one which

will fulfill all the requirements enumerated, and under all circumstances, is a desideratum much longed for by microscopists, but one which, I do not hesitate to say, has not yet been discovered. Cements, for instance, which answer perfectly well for glycerin or aqueous mounting media, will dissolve and rapidly succumb when brought in contact with balsam or prepared damar. On the contrary, those which are unaffected by balsam and its solvents (benzol, turpentine, chloroform, etc.) will soften when used with glycerin or watery fluids. No one cement, therefore, with which we are at present acquainted, will answer under all circumstances. The following are the best cements in use at present:

(a). ASPHALT CEMENT—This is one of the best and earliest of the cements employed in cell making, and up to very recently it was used, either alone or in combination with caoutchouc, drop black, or other ingredients, by the best foreign mounters, almost to the exclusion of all other cements. It is known in commerce as *Brunswick black* and, as purchased from dealers in painters supplies, consists of the best foreign asphalt dissolved, with the aid of heat, in linseed oil. Litharge and gum amber are added during the boiling, which is continued until all fluids are driven off and a nearly solid mass is obtained. This mass, dissolved in oil of turpentine, constitutes the asphalt varnish of commerce. The varnish may be used alone for cell making, but a far better cement results when the solid asphalt, prepared as above, is dissolved in twice its weight of benzol, in every ounce of which four grains of caoutchouc have been previously dissolved. Black Japan varnish is sometimes used in place of Brunswick black. One of the best articles of this sort that has ever come under my notice, one which presents when finished an appearance identical with the cell material used by the celebrated French mounter, Bourcogne, of Paris, is a black enamel leather dressing used by carriage finishers. It comes in square tin flasks, holding one pound, and may be obtained from any dealer in coach makers' supplies.

(b). GOLD SIZE. This is another most excellent cell building and finishing cement. The kind used is that technically known among gilders as oil size, and used for gilding outside work which has to stand the action of the weather. It may be obtained ready-made from any dealer in artists' or painters' supplies. There is

much difference, however, in the quality of the material as sold by dealers in microscopical accessories—a great deal of it being nothing but boiled linseed oil. The following is the process for preparing the best: Grind together twenty-five parts of strained or filtered linseed oil, one part calcined red ochre and one part red lead, and boil for three hours. Let stand until the solid matter sinks to the bottom and decant the clear fluid. Mix the latter with an equal bulk of white lead, boil for an hour and again let stand and decant. The clear liquid is a size that attaches to glass with wonderful tenacity and dries as hard as flint. It will stand much rough usage and is altogether one of the very best of cements.

(c). SHELLAC CEMENT. Break white shellac into small pieces and soak in sulphuric ether over night. In the morning pour off the surplus ether, drain completely and dissolve in absolute alcohol. Bleached shellac dissolves very slowly, even with the previous softening in ether, and it requires a long maceration to obtain a good solution. A considerable amount will remain undissolved after weeks of contact with absolute alcohol. To obtain a limpid product, add to the solution about one half its volume of benzol, agitate and let stand. In a few hours the liquids will separate, the benzol retaining the detritus and leaving a layer of perfectly clear alcoholic solution of shellac. This makes a very beautiful and durable cell. It may be colored to the taste by the addition of any of the anilin dyes that are soluble in alcohol.

(d). OXIDE OF ZINC CEMENT. To prepare this cement well requires some labor and care, which, however, are in my opinion amply repaid by the result, since for excellence and general utility this cement is inapproachable by any other yet invented. The materials are gum damar, benzol, oxide of zinc, and a small amount of some drying oil, preferably nut or poppy oil. The damar is dissolved in benzol to the consistency of a thin syrup, and the solution carefully filtered through absorbent cotton. The zinc oxide should be white and perfectly free from moisture, to ensure which I am in the habit of drying it thoroughly by heating in a muffle. The zinc changes color, becoming yellow under heat, but soon regains its whiteness. In preparing the cement only a small portion of the zinc should be put into the mortar at once.

This should first be wet with a few drops of benzol, the solution of damar then added, and the whole carefully rubbed until a smooth and intimate incorporation of the ingredients is effected. The mixture is then poured into a stock bottle and the operation repeated until a sufficient amount of the cement has been made. In despite of the most careful and continued use of the pestle or muller, some portion of the zinc will remain uncrushed, and to get rid of these particles the fluid must be filtered through absorbent cotton or allowed to stand awhile and then decanted.

The latter is far the best and most economical process. The larger particles sink more rapidly than the finer ones, and in the course of two or three decantations an exquisitely smooth and homogeneous fluid is obtained.

To get the best results in practice, the proportions of zinc and damar solution, in the finished cement, should be about equal. To secure this result let the decanted fluid stand until all of the zinc has separated and fallen to the bottom of the vessel. If there is not enough of the damar solution, more can be added from the stock bottle. If too much be present, the surplus may be drawn off with a pipette. The cement is completed by the addition of from fifteen to twenty minims of drying oil to each ounce of cement. Without the latter ingredient the product becomes brittle on drying.

As thus made, and used with the precautions hereafter indicated, there is in my opinion no cement which can compare with it, either in the smoothness with which it flows from the pencil, rapidity of drying, tenacity and evenness of attachment, or the hardness and toughness of the product. In addition to these practical recommendations, there is nothing in the way of cements that is more beautiful in finish. In saying this much about the cement I am quite aware that it has been decried and abused by certain parties, belonging to that class of workmen who invariably lay their own lack of skill upon the tools they use. I have used it constantly for fifteen years and whenever it has failed to make a good and durable mount the failure could be traced directly to my own negligence or carelessness.

(e). MARINE GLUE.—Dissolve one part of caoutchouc in 32 parts of coal tar naphtha, and when solution is complete (in the course of 8 or 10 days) add $2\frac{1}{2}$ parts of dark shellac in fine

powder and let the vessel, closely stoppered, stand for another week or ten days. At the expiration of this time put it into a sand-bath and heat carefully until the undissolved portions of shellac and caoutchouc are liquefied and a homogeneous fluid is obtained. This should be poured upon a cold plate or slab and allowed to solidify, after which it may be broken into pieces and preserved for use. It requires a temperature of 240°F. to liquefy this cement. It is the most tenacious of all substances yet devised for this purpose.

A liquid cement, resembling the foregoing in general characteristics, may be made by dissolving 1 part of india rubber in 12 parts of benzol and adding to the solution 20 parts of shellac. Heat in a water bath until solution is complete. This cement may be applied with a pencil—which that made by the former process cannot be, unless redissolved in benzol or naphtha.

(f). BELL'S CEMENT is the proprietary name of the shellac solution given above (c).

(g). DIAMOND CEMENT.—Dissolve one ounce of best Russian isinglass in $5\frac{1}{2}$ ounces of distilled vinegar. In a separate vessel dissolve a half ounce each of gum ammoniac and gum mastic in two ounces of alcohol and mix the two solutions. This cement is very tenacious and is used by Oriental jewelers in setting precious stones.

SEILER'S CEMENT is a modification of the above. It is made by dissolving two drams of isinglass in one ounce of acetic acid in which ten grains of gum ammoniac have been previously dissolved.

A similar cement may be made by dissolving one ounce of isinglass in four ounces of hot skimmed milk.

(h). CASEIN CEMENT is made by dissolving curd or pot cheese, made from skimmed milk, in a hot saturated solution of borax. It makes a hard and brilliant cement, useful in certain cases.

(i). ARABICIN CEMENT.—To a thick solution of gum arabic add sufficient alcohol to throw down the arabicin in the form of a white flaky deposit. Throw on a filter and wash with alcohol, dry and redissolve in distilled water to the consistency of an officinal syrup. To each ounce of the solution add twenty-four grains of sulphate of aluminium and dissolve. With this as an excipient, rub in sufficient finely pulverized talc to make a fluid of about the same consistency as good zinc cement. This cement may be made directly from a solution of gum arabic, but it does not

keep so well as when the arabicin alone is used. It is useful for building cells for balsam mounts, answering the same purpose in these cases as zinc cement does when glycerin or aqueous mounting media are used.

As in the case of stains, formulæ for cements might be multiplied almost *ad infinitum* were any good purpose subserved by it. With those given above the student can meet all the exigencies of microscopical technology, and any more would be superfluous.

Department of Dermatology and Syphilology.

CONDUCTED BY

A. H. OHMANN-DUMESNIL, A. M., M. D., of St. Louis.

VALUE OF ARSENIC IN SKIN DISEASES.—At a recent meeting of the New York Dermatological Society, Dr. Geo. H. Fox read a paper on the "Value of Arsenic in Skin Diseases" (*Jour. of Cut. and Ven. Dis.*) in which he very justly says that the very common practice of giving arsenic in nearly every case of skin disease is both irrational and harmful. In the first place, it is irrational, because in the majority of cases arsenic produces little if any benefit; and in the second place, it is harmful because, in many cases, it increases the cutaneous congestion, makes pruritus more intense and it is frequently relied upon to the exclusion of better plans of treatment. Its indiscriminate use should be suppressed by all means and teachers, especially, should take pains to emphasize the fact that arsenic is indicated in but a limited number of diseases and in some of these only under certain conditions. It is not a cure-all for skin diseases, by any means.

THE CLINICAL FORMS OF HERPES TONSURANS.—In a communication made to the physicians who inspect the schools of Paris, Dr. Paul Richard states (*France Médicale*) that, heretofore, too much attention has been devoted to the pathogeny of ringworm of the scalp and not sufficient care taken to describe its clinical features. He describes two forms which are clearly defined and which he designates as pityriatic and impetiginous. In the former we

have the dry form with the well-known bald spots accompanying it. It is the classical form, which seems to make an effort to limit the process. Besides, there is no inflammatory reaction. In the other form, we have a moist variety which may extend to all of the hairy scalp. The hairs are infiltrated with sores, here and there and an inflammatory action which may, in some cases, give rise to an eruption resembling sycosis. It is not an impetigo and is much more amenable to treatment and heal in a shorter time. A sort of natural epilation takes place; and as epilation is of all treatments, the best, the results are proportionately better. In conclusion, the author advises all to regard with a certain amount of suspicion, those cases of impetigo which are stubborn to all treatment and examine the hair and crusts for the parasite of ring-worm. This is the more important as it not only renders treatment more rational, but it also serves to place the physician in such a position as to prevent epidemics, which are oftentimes very difficult to suppress when once they have gained a foot-hold in a school.

THE VALUE OF LANOLIN.—Dr. Geo. Henry Fox, contributes a short paper on the above subject to the *Journal of Cutaneous and Venereal Diseases*. To determine whether it had any superiority over lard or vaselin, so far as being absorbed by the skin was concerned, some experiments were made at the N. Y. Skin and Cancer Hospital with the following results after fifteen minutes friction on the anterior surface of the fore-arm of a girl:

Weight of lanolin used			15 grains.
"	"	"	removed from skin 5 "
"	"	"	absorbed 10 "
"	"	"	lard used 15 "
"	"	"	removed from skin 10 "
"	"	"	absorbed 5 "

In another experiment the comparative rapidity of absorption of lard and vaselin was tested, upon the back of a young man, being rubbed in fifteen minutes, with the following result:

Weight of lard used			15 grains.
"	"	"	removed from skin $8\frac{1}{4}$ "
"	"	"	absorbed $6\frac{3}{4}$ "
"	"	"	vaselin used 15 "
"	"	"	removed from skin $9\frac{1}{2}$ "
"	"	"	absorbed $5\frac{1}{2}$ "

The author has not observed any remarkable effects following the use of lanolin, and in this he has others who agree with him, lard being often preferably employed. He concludes that as it is more readily absorbed by the skin than any other fatty substance, it is useful as a basis for ointments when an effect upon the deeper skin or upon the whole system is required.

ERYTHEMA MULIFORME, ITS NATURE AND SPECIFIC TREATMENT.—M. Villemin, at a late meeting of the Académie de Médecine of Paris concluded in relation to erythema multiforme (*érythème polymorphe*) that if specific therapeutics implies specific etiology, and if the same medicinal agent causes different eruptions to rapidly recede, we are justified in accepting the following propositions:

1. That the erythemata, to which the epithets nodosum, papulosum, circinatum, vesiculosum, etc., have been applied, are nothing but varieties of the same morbid type. 2. Erythema multiforme is a general disease of specific nature, of which the cutaneous eruption is only a syndroma. 3. The pains of the fibrous tissues, the swellings and articular affections are not rheumatic but manifestations due to the same morbid cause as the eruption.

The medicinal agent, to which the author alludes, is iodide of potassium. In the space of twenty-four or forty-eight hours, with a mean dose of two grammes (30 grains) daily, all the symptoms of the disease are modified in a surprising manner. The disappearance of the exanthem and the resolution of the nodosities take place with the greatest rapidity and it is the papules and tubercles which have last appeared that are the first to leave. Of course, we are left in the dark as to the cause, yet the paper is a sufficiently valuable one in its therapeutic indications, if, as the author contends, iodide of potassium is a specific for the various forms.

GENERAL SEMEIOLOGY OF TERTIARY SYPHILIS.—Charles Mauriac of the Hôpital du Midi gives (*France Médicale*) the following as the general and essential characteristics of tertiary syphilis: 1. The absence of general and local prodromata; 2. The insidious character of the attack; 3. The latency of the phenomena during their evolution; 4. The futility of synergetic efforts and the sympathetic or reflex phenomena; 5. The isolation of lesions. 6. The uncertainty existing on the topography of circumscribed points of the organism in which the processes take place; 7. The depth, tenacity and the disorganizing faculty, so to speak, of the

morbid process. It was at first supposed that amyloid degeneration was an essential part of the syphilitic cachexia. But it seems to be proven to-day that syphilis does not produce this degeneration of itself, as it is only exceptionally found in the liver, for example, when that organ presents characteristic syphilitic alterations. According to Virchow, amyloid degeneration of the spleen, liver, kidney and intestines, accompanies more rarely syphilis than the scrofulous affections of the bones. In the initial cachexia or that of intoxication, the symptoms which predominate are those of cellular impoverishment of the blood. There are also observed abortive, irregular, intermittent attempts, of febrile reaction, and algidities with multiple foci, which show the perturbation of the nervous system produced by the first impression of the virus on the organism. In the ultimate or constitutional cachexia, all the elements of the blood seem to be implicated. The marasmus is progressive and the hectic fever attests the impotence of the efforts at reaction of the economy against the numerous causes which drain it little by little.

THE FACTORS AGGRAVATING SYPHILIS.—Prof. Fournier has delivered several lectures upon this subject at the Hôpital St. Louis. Among the most common factors in the category which render an attack of syphilis more grave, alcoholism occupies, perhaps, the front rank. After this may be mentioned the extremes of life, infancy and old age. Then we find that scrofula and tuberculosis are also potent agents in the same direction, and it has been pretty well demonstrated that syphilis exercises quite an influence in the pulmonary localization of tuberculosis. Another factor in the production of graver cases of syphilis is malarial intoxication (*impaludisme*), which although less known is none the less marked. Besides, we have, what may be denominated in a general way, all those causes which tend to weaken the organism and diminish the vital resistance. The most common and, at the same time, most active is poverty. Overwork is another factor which we find among all classes, from the laborer to the scientific man; whilst, in fashionable circles and in those people subjected to great strains on the nervous system we find that syphilis assumes a grave form when contracted by them, the nervous system being implicated. Two more factors remain which also exert a notable influence, and these are hereditary predisposition and the influence of the absence of treatment.

THE TREATMENT OF CHRONIC GONORRHEA.—Dr. O. D. Ball's treatment is essentially as follows (*Albany Medical Annals*): The direct application of zinc oxide to the diseased membrane. The ointment is composed after the following formula :

R̄	Zinci Oxidi.....	3	ijj
	Adipis.....	3	ijj
	Cerati Simp.....	3	ij

M.

This will adhere nicely to the bougie and yet be soft enough to apply itself to the urethral membrane. An olive pointed bougie is used, somewhat smaller than the calibre of the urethra. The constricted portion of the instrument is filled out evenly and smoothly and the bougie is carried down to the prostatic portion of the urethra as rapidly as possible and then, after relating it in both directions, it is slightly withdrawn and pushed back again. The applications should be made twice daily. In fifteen cases which the author treated, the average time of treatment was four weeks ; the longest time was eight weeks and the shortest ten days. The author very pertinently remarks when speaking of the pathology of these chronic discharges, that the statement of Otis, that "all cases of gleet are dependent upon strictures either of large or small calibre" is wrong. Of course, in those cases where stricture exists, this must be first treated, the treatment given above being applicable only after the narrowing of the urethra has been remedied.

SHORT TALKS, ON DERMATOLOGY.

Under the above Caption the Editor of this Department proposes, in each number of the JOURNAL, to give a short practical synopsis of the principal points attaching to the diagnosis and treatment of some skin disease. No attempt will be made to follow any classification, but diseases will be taken up as they suggest themselves.

IX. ALOPECIA AREATA.

This disease, more familiarly known to the older practitioners as Area Celsi or Porrigio Decalvans, is one which is generally easily recognized, and to which attention is called very early by the patient. It consists essentially of the formation of one or more bald spots, more often on the head, which vary in size from a small coin to that of the palm of the hand. Upon examining the

patches, they will be found to be whitish, smooth and entirely destitute of scales or other lesions. Sometimes there is found some lanugo or fine woolly hairs, or a few stumps of broken off hairs. The patch is always surrounded by the normal hair, thus ending abruptly, and being well-marked and defined. It occurs for the most part about the head, although occasionally found to exist in the beard and other hairy regions of the body, or even to involve the whole pilous system. One or more patches may exist and generally, when single, the patch will be relatively larger than when a greater number exists. The favorite site of these is upon the head and more often upon the parietal portions, vertex or occiput. This disease occurs at all ages and in both sexes.

It generally comes on suddenly. The patient will perceive, upon combing or brushing the hair, that a patch or bunch of hair comes out, leaving a bald spot, and this may be all; or hair may continue falling for some time. The patch, however, is soon limited in size and the hair ceases falling. One or several may be perceived; the latter, simultaneously or in close succession.

There are no subjective symptoms connected with alopecia areata. The only objective symptom being the baldness, which is very apparent. There is no difficulty whatever in recognizing the disease, as but few could be mistaken for it, and then only after a very superficial examination. In an old case of ringworm of the scalp the condition might simulate that of alopecia areata, but the difference in history, the dissimilar modes of inception and finally the presence of the parasite would remove all doubts as to the true nature of the disease.

The etiology of this disease is somewhat obscure, although it seems to be dependant upon some perturbed state of the cutaneous nerves. It has been asserted by some few investigators that they had found a parasite, but the failure, on the part of others, to confirm these observations renders them comparatively of little value. The distribution and shape of the lesions, moreover, would seem to point to a nervous origin as well as the suddenness attending the fall of the hair. The smooth and shining appearance of the bald spots is also evidence against its parasitic origin.

The treatment of this disease is general as well as local. The internal remedies to be administered are to be selected according to the condition of the patient, as those affected by this disease are frequently suffering from some nervous trouble. Iron, quinine,

strychnine, arsenic and nervines are indicated and should be exhibited pretty freely. In regard to the local measures to be employed, a large field is offered us. The object, however, is to produce stimulation of a more or less marked character, and for this purpose, a large variety of agents can be employed. The skin is well able to bear strong stimulation, and it should be applied in such a manner as to keep the skin reddened. Blistering about once in ten or fifteen days with acetum cantharidis or cantharidal collodion may be employed; or, if milder measures are indicated, the tincture of soft soap may be used. Aqua ammoniæ is an agent that is very commonly used in this disease. The oleate of mercury in five or ten per cent. strength, applied daily, acts favorably in many cases, as does also corrosive sublimate in the strength of about three or four grains to the ounce of alcohol. Beta naphthol in a solution of alcohol has been found beneficial, especially if combined with frictions by the aid of a coarse towel.

Ointments are frequently employed, and their active constituents consist of cantharides, chrysarobin, pyrogallie acid, and other similar remedies. Duhring gives the following cantharida lotion which contains other desirable ingredients:

R	Tinct. catharidis,	
	Tinct. capsici,	āā 3ss
	Olei ricini.....	3 ij
	Aq. Coloniensis.....	3 j
M.		

Tilbury Fox recommends, locally, a mixture containing tincture of nux vomica, tincture of cantharides, distilled vinegar, with glycerin and water as efficacious. A remedy that is well worthy of a trial is electricity in the form of an ascending galvanic current.

The disease is one which, after persisting for a certain length of time, usually some months, takes on a tendency to spontaneous recovery. In other words it is self-limited. When this spontaneous recovery takes place it manifests itself by the growth of small, fine hairs, which are shed once or twice before the growth becomes permanent. As a rule the progress as to the ultimate result, in this disease, is good. The younger the patient, the more rapid will the recovery be and the better the succeeding growth of hair. Treatment hastens recovery, and by its stimulation also increases the tendency to a larger growth of hair.

1886.]

Department of Diseases of the Eye and Ear.

CONDUCTED BY

A. D. WILLIAMS, M. D., of St. Louis.

CLOSE SYMPATHY BETWEEN THE CONJUNCTIVA AND SCHNEIDERIAN MEMBRANE AND DIAPHRAGM.—Any irritation of the mucous membrane of the nose is at once reflected upon the conjunctiva and lachrymal glands. The eyes nearly always become red and tears flow profusely when a person suffers from a bad cold, which is nothing more than fresh inflammation of the nasal mucous membrane. This is a form of reflex irritation. The same irritation of the nose causes reflex irritation of the diaphragm and persistent sneezing is the result. The sympathy, therefore between eyes, nose and diaphragm is very close.

FIRST RUSSIAN OPHTHALMOLOGICAL SOCIETY—The first medical congress that ever met in Russia took place last December in St. Petersburg. In this medical congress was a section on Ophthalmology. This section at once determined to form a society of its own and the organization will be perfected in the latter part of '86. Russia is a very old country and certainly has been very slow in forming medical societies of any kind.

WHITE ATROPHY MAY FOLLOW AN INJURY AFTER TWENTY YEARS.—During the war a colored man was working on a steamboat when the boiler blew up. The man was rendered unconscious and remained so for quite a while. He suffered with his head for some time but finally all trouble passed off and he thought no more about the accident. Quite recently he noticed that his vision began to fail him, on account of which he consulted me a few days since. On examination I found that both optic nerves were far advanced in white atrophy. The right eye was already totally blind; with the left eye he can still see enough to get about and do rough work. The only cause I could find for the atrophy of the optic nerves was the injury to the head from the explosion and I am satisfied that that was the real cause. The point of interest in the case is that the atrophy should come on so long after the injury. The prognosis is very unfavorable. The man will

certainly become totally blind. As the nerves were extremely white, I gave him strychnine internally, as that has the power to increase the blood supply to the optic nerves. The man thinks he sees better but I suspect that it is imagination on his part.

THE MYOTIC EFFECTS OF ESERINE counteract the mydriatic effects of Cocaine. The contracting power of eserine on the pupil is greater than the dilating effect of cocaine. This fact makes it possible to use cocaine in the eye for its anæsthetic effect, and at the same time avoid the enlargement of the pupil. In some surgical operations, while it is necessary to have its narcotic effect, it is important to avoid its mydriatic. This is easily accomplished by using eserine and cocaine together.

Schweigger (on Cocaine, reviewed in *Arch. of Oph.*) reports a case of the kind in which the desired object was easily attained.

AN ELECTRIC OPHTHALMOSCOPE.—The latest thing in ophthalmoscopes is an instrument in which electricity is used for illuminating purposes. The electric lamp is placed in the handle and gives a light of only three-quarters candle power. This light has no advantage over gas or lamp light. The instrument is an interesting curiosity, ingeniously constructed, and described by Dr. Dennett, of New York, in the *Trans. of Am. Oph. Society* for 1885.

INSANITY CAUSED BY NOISES AND SUPPOSED BUGS IN THE EARS.—Tinnitus aurium is very common in diseases of the ear. The noises in some cases are so loud that they become absolutely distressing to the patients. Day and night they can hear nothing but the persistent and unintermitting "rattle" in their ears; at night they cannot sleep on account of the noises. It is no wonder that such persons sooner or later become perfectly desperate. Such patients have repeatedly said to me: "If there is to be no end to these noises, I will put an end to myself. Life is an unbearable burden under such circumstances." Without doubt many persons are made crazy by these noises. I remember a boy about fourteen, who would maul his head with his fists with all his might and would butt his head against brick and stone walls, trying to stop the noises. Such persons are objects of great pity. Then, again persons often get an idea that a bug or some living, crawling, thing has gotten into the ear and worked its way into the brain, causing ugly and unpleasant noises. While the bug idea is a delusion, no amount of persuasion or scolding can change

their impressions. I know a woman in this city, who tells about the "bug in her brain" whenever I will listen to her. She knows it is there because she can feel it "squirming in the brain."

Whenever a person has a settled conviction that he has a bug in his brain he is not far removed from insanity.

Just this afternoon a woman came in, saying she thought she had a fly in her ear, but I could not find any.

Society Proceedings.

INTERNATIONAL MEDICAL CONGRESS.

At the meeting of the committee, held here the day previous to the meeting of the American Medical Association, the preliminary organization of the Ninth International Congress was completed, and the following is the list of officers to which will be added, at an early date, the list of foreign officers, as required by the rules:

President, N. S. Davis, M. D., LL. D., Chicago, Ill.; Vice-Presidents, W. O. Baldwin, M. D., * Montgomery, Ala.; Wm Brodie, M. D., Detroit, Mich.; W. W. Dawson, M. D., Cincinnati, O.; J. A. Grant, M. D., Ottawa, Canada; E. M. Moore, M. D., Rochester, N. Y.; Tobias G. Richardsou, M. D., New Orleans, La.; Lewis A. Sayre, M. D., New York; J. M. Toner, M. D., Washington, D. C.; The President of the American Medical Association; The Surgeon-General of the United States Army; The Surgeon-General of the United States Navy; The Supervising Surgeon-General of the United States Marine Hospital Service.

Secretary-General—Jno. B. Hamilton, M. D., Washington, D. C.

Treasurer—E. S. F. Arnold, M. D., New York.

Chairman of the Finance Committee—R. J. Dungleison, M. D., Philadelphia.

Chairman of the Executive Committee—Henry H. Smith, M. D., Philadelphia.

Chairman of the Local Committee of Arrangements—A. Y. P. Garnett, M. D., Washington, D. C.

Executive Committee of the Congress—Henry H. Smith, M. D., Chairman, Philadelphia; N. S. Davis, M. D., LL. D., Chicago;

*—Died May 30, 1886.

Jno. B. Hamilton, M. D., Washington; E. S. F. Arnold, M. D., New York; R. J. Dunglison, M. D., Philadelphia; A. Y. P. Garnett, M. D., Washington; F. S. Dennis, M. D., New York; Abram B. Arnold, M. D., Baltimore; Wm. T. Briggs, M. D., Nashville, Tenn; DeLaskie Miller, M. D., Chicago; Jas. F. Harrison, M. D., University of Virginia; F. H. Terrill, M. D., San Francisco; Wm. H. Pancoast, M. D., Philadelphia; J. H. Callender, M. D., Nashville, Tenn.; A. B. Palmer, M. D., L. L. D., Ann Arbor, Mich.; J. Lewis Smith, M. D., New York; E. Williams, M. D., Cincinnati; S. J. Jones, M. D., LL. D., Chicago; Wm. H. Daly, M. D., Pittsburg; A. S. Robinson, M. D., New York; Jos. Jones, M. D., New Orleans; Albert L. Gihon, M. D., U. S. N., Washington; Jno. P. Gray, M. D., LL. D., Utica, N. Y.; Jonathan Taft, M. D., Cincinnati.

Local Committee of Reception and Arrangement.—A. Y. P. Garnett, M. D., Washington, Chairman; The Surgeon-General of the U. S. Army; The Surgeon-General of the U. S. Navy; the Supervising Surgeon-General of the U. S. Marine Hospital Service; J. H. Baxter, M. D., U. S. A.; J. M. Toner, M. D., Washington; N. S. Lincoln, M. D., Washington; C. H. A. Kleinschmidt, M. D., Washington and forty more in the District of Columbia.

PRESIDENTS OF THE SECTIONS.

General Medicine.—Abram B. Arnold, M. D., Baltimore.

General Surgery—Wm. T. Briggs, M. D., Nashville, Tenn.

Military and Naval Medicine and Surgery.—Henry H. Smith, M. D., Philadelphia.

Obstetrics—De Laskie Miller, Ph. D., M. D., Chicago.

Gynæcology.—Jas. F. Harrison, M. D., University of Virginia, Va.

Therapeutics and Materia Medica.—F. H. Terrill, M. D. San Francisco.

Anatomy.—Wm. H. Pancoast, M. D., Philadelphia.

Physiology—J. H. Callender, M. D., Nashville.

Pathology—A. B. Palmer, M. D., LL. D., Ann Arbor, Mich.

Diseases of Children—J. Lewis Smith, M. D., New York.

Ophthalmology—E. Williams, M. D., Cincinnati.

Otology—S. J. Jones, M. D., LL. D., Chicago.

Laryngology.—Wm. H. Daly, M. D., Pittsburg.

Dermatology and Syphilis.—A. R. Robinson, M. D., New York.

Public and International Hygiene.—Jos. Jones, M. D., New Orleans.

Collective Investigation, Vital Statistics and Climatology—Albert L. Gihon, M. D., U. S. N., Washington.

Psychological Medicine and Nervous Diseases—Jno. P. Gray, M. D., LL. D., Utica, N. Y.

Dental and Oral Surgery—Jonathan Taft, M. D., Cincinnati.

AMERICAN SURGICAL ASSOCIATION.

The Ninth Annual Meeting of this body was held in Washington, D. C., April 28, 29, and 30 and May 1, 1886. The President, Dr. Moses Gunn, of Chicago, was in the chair. Among the more important papers read, were the following:

“A Plan for Atmospheric Purification for Surgical and for Hygienic Purposes,” by Dr. David Prince, of Jacksonville, Ill.; “Traumatic Aneurism of Internal Carotid Artery,” by Dr. T. F. Prewitt, of St. Louis; “Cholecystotomy,” by Dr. C. T. Pafkes, of Chicago; “The Surgery of the Pancreas,” by Dr. N. Senn, of Milwaukee. Dr. C. H. Mastin, of Mobile, proposed a plan for uniting the American Surgical Association, American Ophthalmological Association, American Otological Association, American Neurological Association, American Laryngological Association, American Gynæcological Association, American Dermatological Association, American Climatological Association and American Clinical and Pathological Association into one Annual Congress of Physicians and Surgeons. The proposition was referred to a special committee. The following officers were elected for the ensuing year.

President—Hunter McGuire, M. D., Richmond, Va.

Vice-Presidents—T. F. Prewitt, M. D., St. Louis; J. W. S. Gouley, M. D., New York.

Secretary—Jacob R. Weist, M. D., Richmond, Ind.

Treasurer—P. S. Conner, M. D., Cincinnati.

Recorder—J. Ewing Mears, M. D., Philadelphia.

Council—Moses Gunn, M. D., Chicago; R. A. Kinloch, M. D., Charleston, S. C.; Hunter McGuire, M. D., Richmond, Va.; Jno. S. Billings, M. D., Washington, D. C.; and L. McLane Tiffany, M. D., Baltimore.

The next place of meeting will be Washington, D. C., beginning on the second Wednesday in May, 1887.

[July,

Book Reviews.

PRACTICAL CLINICAL LESSONS ON SYPHILIS AND THE GENITO-URINARY DISEASES. By FESSENDEN N. OTIS, M. D., 8vo. pp. 584. N. Y.: Printed for the author 1886. St. Louis, J. L. Boland, 610 and 612 Washington Ave. Price \$2.00.

It is now about three years since the work appeared of which this is a reproduction. It is the intention of the author to issue a second edition in a short time, the present one having been reprinted on account of the demand existing for the book among students. The sixty-eight lessons into which this book is divided cover the subject pretty fully. The first twenty-three lessons are devoted to syphilis, in which Otis enunciates his well known views on the cell of syphilis and its possible existence. The next seven lessons are devoted to the chancroid, terminating the first part with a formulary.

PART II. Nine chapters are devoted to gonorrhœa and gleet, the latter of which he contends is always due to stricture. The next few lessons are devoted to the complications of gonorrhœa, —folliculitis, urinary infiltration, external perineal urethrotomy, urinary extravasation, epididymitis, prostatitis, cystitis and stricture. In the treatment of this last disease the author, as is well known, recommends dilating urethrotomy, claiming results which are not only good but permanent. Reflex and spasmodic affections and reflex irritations are treated of in the lessons that follow; the two last being devoted to digital exploration of the bladder as an aid to diagnosis in obscure cases.

It has been thought best not to write an extended review of this work until the promised second edition appears. It is, on the whole, an excellent manual, embodying the views of Dr. Otis and representing very well his class-room lectures, which are always listened to with interest. A new edition may, however, differ considerably from the one before us and as its appearance is promised as being near, it has been deemed best to defer until that time an analytical review of the work. The typographical execution of the present work is good, the plates having retained all of their

freshness, the type being clear and the press-work of good quality.

A. H. OHMANN-DUMESNIL.

THE STUDENT'S MANUAL OF VENEREAL DISEASES ;—Being a Concise Description of those Affections and of their Treatment. By BERKELEY HILL, M. D., and ARTHUR COOPER, M. D.: Fourth Edition, Revised. 12mo. pp. 132. [Phila. P., Blakiston, Son & Co., 1886.

The fact that this is the fourth edition of this little work is sufficient testimony respecting the favor with which it has been received. Messrs. Hill and Cooper have written a very readable little book and have taken care, from time to time, to keep it in line with the more recent advances made in the subjects to which it is devoted. The dualist theory is adopted and, like all English dualists, our authors style chancre what we denominate chancroid and what we call chancre they term syphilis.

We find it stated on p. 25 that "the sole *exciting cause* of syphilis is a subtle non-volatile principle called the virus, which except in the case of inheritance, enters only at a breach of surface." We do not wish to discuss the subject at length, but is it not time to realize the fact that diseases are not inherited and that hereditary (?) syphilis is the result of the action of this same virus and which has entered the economy of the child? We find the authors on page 62, say that in inherited syphilis, with the exception of the "primary symptoms," the "course and symptoms are, in many respects, similar to those of the acquired disease." Why should not the cause be the same the same, then? The consideration of the subject of syphilis occupies eighty-seven pages, after which chancre (chancroid) is disposed of in about seven pages, the remaining twenty-four pages being devoted to gonorrhœa. The authors are entirely in favor of "systematic treatment" or internal remedies in clap. We must say here that it is more rational, and it will be found more satisfactory, in the long run, to employ injections suited to the requirements of the case which is being treated; and when properly used they are not only as safe but probably more so than the general treatment. On p. 100 the authors speak of injections in subacute cases and of the rapidity with which the discharge is often controlled.

Following this, the complications of gonorrhœa are noted and gonorrhœa in woman taken up. The accessory venereal disorders such as abrasions, warts, herpes, phthiriasis and scabies are mentioned, as also balano-posthitis, paraphimosis, etc. A formulary concludes this excellent little hand-book, which should be carefully read by every student who takes any interest in the subject, as a sort of preliminary appetizer before taking up the reading of larger works on the subject.

A. H. OHMANN-DUMESNIL.

ON THE AFFECTIONS OF THE SKIN INDUCED BY TEMPERATURE VARIATIONS IN COLD WEATHER; With Incidental Reference to the so-called "Prairie Itch," "Ohio Scratches," "Michigan Itch," "Texas Mange," "Camp Itch," "Prairie Digs," "Lumbermen's Itch," "Swamp Itch," etc., and some Consideration of their Relation to Cutaneous Pruritus, Pruritus Hiemalis, Winter Prurigo, Winter Eczema, Scabies, etc., etc. By JAMES NEVINS HYDE, M. D., 8vo. pp. 51. [Chicago. Clark & Longley, Publishers, 1886. From the author.

This is a very interesting and clear exposition of the subject of which it treats, which is one of considerable importance not only in the northwest but all over the country. Of late years, these epidemics of pruritic troubles have been numerous and pretty constant and the country doctors have been nonplussed when they found that their lard and sulphur applications were powerless to allay the disease.

As Dr. Hyde says, it is not so much the shrinkage of the mercury to a low point, as its rapid play from one point to another that begets the mischief. As he also says, it is true that the skin of some persons sympathize fully with the summer variations of temperature. I have observed within the month, when excessive heat suddenly developed, hundreds of persons who became affected with an intolerable pruritus. No other cause could account for its sudden development, and its intensity was such as to be positively distressing and even alarming to some, because they could find no objective symptoms. In the northwest, of which Dr. Hyde speaks, this pruritus occurs more often in cold weather.

We are given a graphic picture of the various forms of skin trouble which temperature variations in cold weather may occasion and the author of this valuable monograph adduces some unanswerable arguments, establishing clearly the non-parasitic

nature of these troubles. The short sketch of scabies and its differentiation from the diseases under consideration is a choice bit which we would recommend every one interested in the subject to read.

The treatment of winter itch is general and local and is founded upon the most approved plans. It covers the ground very thoroughly and embodies the best means and remedies.

The major part of this pamphlet appeared in the *Chicago Medical Journal and Examiner* in March 1885, and Feb. 1886. Every page, however, has been revised and a good part re-written, the result being an essay which is both interesting and valuable to a high degree.

A. H. OHMANN-DUMESNIL.

THE PRINCIPLES AND PRACTICE OF MEDICINE. By the late CHARLES HILTON FAGGE, M. D., F. R. C. P., including a Section on Cutaneous Diseases, by P. H. PYE-SMITH, M. D., F. R. C. S., Chapters on Cardiac Diseases, by SAMUEL WILKES, M. D., F. R. S., and Complete Index, by ROBERT EDMUNDS CARRINGTON, M. D., Vol. II. 8vo. pp. 883. [Phila; P. Blakiston, Son & Co. 1886.

The second volume contains articles on the diseases of the heart and bloodvessels which are followed by diseases of the alimentary tract, including affections of the nose, mouth and salivary glands. Diseases of the liver, of the spleen and of the lymph glands are next taken up. About one hundred and seventy pages are devoted to affections of the urinary organs, including Addison's disease. The general diseases affecting the joints are considered; this class is made to include gout, acute rheumatism arthritis deformans and gonorrhœal synovitis. Rickets and mollities ossium constitute the diseases of the bones which are described. The diseases of the blood represented by scurvy, anæmia, hæmophilia and purpura are disposed of in about thirty pages.

One hundred fifty pages are devoted to skin diseases. In this Dr. Pye-Smith has not followed any particular order. Beginning with some general considerations on the subject of skin diseases he proceeds to give a part of the terminology of the subject. The first subject he considers is eczema which he defines as "idiopathic, common, superficial dermatitis," a definition which will hardly be accepted with the knowledge we

now possess upon the subject. He keeps on repeating this that eczema is common dermatitis, whilst he implies that it is an inflammation of peculiar character which affects the skin. His treatment consists principally in local applications and restricting the diet in acute cases. Internally, he advises saline laxatives, opium for the itching or chloral in infants. He very wisely condemns the use of arsenic. Lichen and prurigo are next considered including strophulus pruritus. Pityriasis rubra is accorded too much space, as it is a disease which is comparatively rare, easily recognized and not followed by very encouraging results so far as treatment is concerned.

Psoriasis is next considered at some length. He mentions the usual local remedies but fails to note the good effects which sometimes follow the external use of salicylic acid and of *sapo viridis*. Pemphigus, scabies, erythema, and the drug eruptions are next considered. He considers herpes a vesicular erythema, erythema nodosum and urticaria being regarded as closely allied to the same disease.

The disorders of the sebaceous glands, hair sacs and sweat glands are disposed of in nineteen pages. Among these we find furuncles and carbuncles included. In the next division ringworm and its allies, with other affections of the hair are taken up, alopecia areata, alopecia and trichoclasia being sandwiched in between ringworm, favus and tinea versicolor. Chronic deep inflammations and hypertrophies are disposed of in five principal diseases whilst lupus occupies twelve pages and lupus erythematosus about two; rhinoscleroma is afforded a few paragraphs here. Leprosy is next considered, followed by tumors of the skin, and this part of the work concludes with the pigmental, hæmorrhagic, and neurotic affections of the skin, which are disposed of in about half a dozen pages.

We notice a tendency to change the termination of such words as end in "derma," to "dermia," e. g., leucodermia, melanodermia, syphilodermia, etc. This volume is better than the first as there is an evident effort made to fully cover a number of important subjects; and the work has been fairly done, considering the difficulty it entailed on account of the restricted space. Dr. Carrington has furnished about one hundred pages of indexes of authors and of subjects and has done his work well.

The mechanical execution is excellent and the publishers have

succeeded in making the volumes look handsome and clearly printed.

We wish to mention also, in particular, the good work done by Dr. Samuel Wilkes in the articles on cardiac diseases, a subject at all times difficult to handle.

A. H. OHMANN-DUMESNIL..

LESSONS IN QUALITATIVE CHEMICAL ANALYSIS; by Dr. F. Beilstein; arranged on the basis of the fifth German edition, by Chas. O. Curtman, M. D. Illustrated, 8vo., pp. 200. St. Louis, Druggist Publishing Company. 1886.

This neat and handsome little volume, although modestly called a translation and adaption by Prof. Curtman, is really largely an original book, and is all the more valuable for that reason, as everyone who has the pleasure of knowing the distinguished professor of chemistry at the Missouri Medical College, and St. Louis College of Pharmacy, would naturally expect. In fact, on examining the work closely and comparing it with the German original, we find that Beilstein's work amounts to only 60 pages of the 200 of which the book is composed.

To the 38 examples in inorganic analysis, which comprise the total given by Beilstein, Dr. Curtman has added a number which supply important *laches* in the original, and comprise the latest and best methods for the detection of nitric acid, arsenic, bromine, etc. He has also added a very valuable and important chapter on the examination of substances containing one acid and one base. In those chapters where the original text has been retained, as for instance in the examination of more complex substances containing several acids and bases, Dr. Curtman has supplemented the German author's methods with copious suggestions of his own.

Perhaps the most valuable part of the work, to students and practitioners of medicine, at least, are those on the analysis of drinking water and of urine. The latter are especially full and modern, bringing the subject (which has attracted a great deal of attention of late among physiological chemists in France and Germany) up to a very recent period of progress. The microscopical appearances of normal and pathological urines are illustrated with well-executed plates—not the ordinary stereotyped cuts that make uric acid crystals, for instance, look like anything from

a banana to a bunch of hay, but actual pictures of the deposits. On the whole the work is the most valuable one of the sort that has appeared in this country.

We cannot too highly commend the style of its gener a mechanical make-up and appearance. As a specimen of good clear printing on excellent paper, and of neat and elegant binding, it reflects great credit on our friends of the Druggist Publishing Company. The price of the book is \$1.50, and it may be obtained through this JOURNAL, or by addressing the publishers.

PATHOLOGIE ET TRAITEMENT DES AFFECTIONS PUERPÉRALES, par H. Fritsch, M. D., etc. Ouvrage traduit de l'Allemand par le Docteur Lauwers et le Docteur Hertoghe, Paris, G. Carré; Bruxelles, A. Manceaux, 1885. [12 mo. pp. 284.

In the work before us Professor Fritsch has boldly tackled a subject which has been anything but a favorite one with medical investigators and authors—and that too, notwithstanding the fact that puerperal fever, this fever, that as well said by Prof. Eugene Huber (in his preface to the French translation, “is the destroying angel of women, at once the shame and despair of medicine,” has until very recently carried off annually more victims than the cholera or the plague. It was formerly regarded as being among other fevers and maladies what the secret assassin is among desperadoes,—it treacherously striking its blow in darkness and secret, so that we knew neither when to expect nor how to parry its thrust, and still less how to cure the wound it made. Thus it was that medicine was forced to meet a disease of whose nature we were ignorant, and oppose it by a system of therapeutics at once empirical, blind, and fruitless of results.

The last ten years, however, have removed much of this stigma from both the disease and our treatment of it. It can no longer be regarded as a malady whose origin is shrouded in mystery; and if therapeutics has not yet learned how to heal with certainty its blow when once delivered, prophylactic medicine has at least put it in our power to parry its thrusts or to prevent them altogether. And to that instrument to which medicine owes so much of her recent progress, the instrument that this JOURNAL has striven so continuously to popularize among physicians, THE MICROSCOPE, are due all of the advances that have been made in this direction. Just as the telescope discovered the planet whose

existence and position in the heavens were calculated by Leverrier, just so did the microscope show that puerperal fever was due, as stated by Semmelweis, in 1860, to "organic matter in the state of decomposition."

It is beyond our limits to give even a glance at the table of contents of the work under notice. Its author, Dr. H. Fritsch, Professor of obstetrics and gynæcology at the University of Breslau, is not unknown to American readers, extracts from his contributions to current literature having been frequently translated into American medical journals. His present work is certainly the most practical and scientific yet written upon the pathology and treatment of puerperal fever and disorders of the puerperal state. We sincerely hope that some one well qualified and acquainted with German, will do for English and American practitioners what Dr. Lauwers of Courtrai, and Dr. Hertoghe of Anvers have done for the French, and give us the work in our vernacular.

F. L. J.

SAINT LOUIS TRAINING SCHOOL for nurses, 2nd Annual Report of the Society, also articles of association and by-laws.

THOMAS WILSON SANITARIUM for infants, 6th Annual Report, Jno. A. Tompkins, Treasurer and Corresponding Secretary.

THE GERM THEORY, by J. B. Olcott, South Manchester, Conn. Address delivered before the State Board of Agriculture. Reprint from report of the Secretary the Board.

LE VACCIN DE LA FIEVRE JAUNE, résultats statistiques des inoculations préventives pratiquées avec la culture du microbe atténuée, etc. par le Dr. Domingos Freire. (Pamphlet giving the results, of inoculations with attenuated cultivations of yellow fever virus as practiced in Rio de Janeiro, from January to August 1885). Rio de Janeiro, Leuzinger et Fils, 1886.

CHARLES DARWIN, his Life and Work, by Grant Allen, New York, J. Fitzgerald, Humboldt Library, double number.

A most pleasing narrative that brings out the character of Darwin as a man and citizen, while paying due and discriminating tribute to him as a naturalist.

REPORT OF THE BOARD of Managers of the Observatory of Yale College, for the year 1884 and 1885.

MEMORIA SOBRE AS PTOMAINAS DA FEBRE AMARELLA, representada á Academia Imperial de Medecina de Rio de Janeiro, etc. pelo Dr. Domingas José Freire; Rio de Janeiro, Laemmert & Co. 1885. (Memoire on the ptomaines of yellow fever, by Dr. Domingos Friere, etc., a thesis presented to the Imperial Academy of Medecine of Brazil.

COMPEND OF PHARMACY, by F. E. Stewart, Ph. G., M. D., Philadelphia, P. Blackiston, Son & Co. 1886. [12mo. pp. 196.

This little volume is the eleventh of the now well known Blackiston series of Quiz Compendes, and in its line is quite up, both in quality and general make up, with the preceding volumes of the set. The author is Quiz Master in chemistry and theoretical pharmacy in the Philadelphia College of Pharmacy—the best in America, and is also demonstrator and lecturer on pharmacy in the Woman's College of the same city.

BOOKS AND PAMPHLETS RECEIVED.

Detroit College of Medicine, announcement for 1886–87.

Albany Medical College, announcement for 1886–87. 56th session.

Catalogue of the School of Mines and Metallurgy, Rolla, Mo., for 1885–6.

Central College of Physicians and Surgeons, Indianapolis, Ind. catalogue for 1886–87.

The St. Louis Post Graduate School of Medicine, Polyclinic and Hospital Catalogue for 1886.

Illinois State Board of Health; reports of quarterly meeting held April 15th and 16th, 1886.

Bellevue Hospital Medical College, 26th annual announcement, for 1886–87, with list of graduates.

North Carolina Board of Health; Bulletin for June. A monthly report of the vital statistics of North Carolina.

Tennessee State Board of health; bulletin for the month of June. A monthly publication giving the vital statistics of the State, with abstracts of papers on sanitation and hygiene.

Papillom am 5. Luftroehrenknorpel auf laryngoskopischem Wege entfernt; von Dr. C. Labus, Mailand. [This is a reprint from the *Monatsschrift fuer Ohrenheilkunde* No. 4, 1836.]

Ueber Cocainsucht: vorläufige Mittheilung von Dr. A. Erlenmeier, Aerzte der Heilanstalt fuer Nervenranke in Bendorf am Rhein. Berlin; Verlag der Deutschen Medizinal Zeitung. 1886.

American Public Health Association: Preliminary circular from the secretary, on the programme, etc. of the 10th annual meeting of the society, which will be held at Toronto, Ont., October 5-8, 1886.

The Radical Remedy in Social Science, or Boring of Better Babies, through regulating reproduction and controlling conception. E. B. Foote, Jr. M. D. [A book on a serious subject treated in a style that savors very much of self advertisement.]

Diagnosis and Treatment of Chronic Nasal Catarrh; lectures delivered by Dr. G. M. Lefferts at the College of Physicians and Surgeons of New York. [A very handsomely gotten up advertisement of Listerine, and issued by Lambert & Co. of this city.]

Biennial Report of the Board of Health of the State of Louisiana, made to the general assembly for 1884 and 1885, by Joseph Holt, M. D., President. [This pamphlet is a general review of the quarantine question, discussing the best methods, etc., and making suggestions for the improvement of the system as now in practice.]

Boston Society of Civil Engineers: Report of Committee on weights and measures; also a paper on the "Comparative size of metric and old units with reference to convenience," by Fred. Brooks, read before the society. [Two valuable and practical papers, useful not only to engineers but to physicians and druggists.]

Is Disease of the Uterine Appendages as frequent as it has been represented? Henry C. Coe, M. D. Reprint from the *American Journal of Obstetrics*, etc. [The author takes the stand, now becoming quite a common one with general practitioners, that such

diseases are not nearly so frequent as the specialists would have us believe.

Transplantation and Reimplantation of Eyes after enucleation; by Chas. H. May, M. D. Reprint from the *Medical Record*, May 19th, 1886. [An outline of the history of the operation as performed by Chibret, Terrier, Rohmer and Bradford, and all of which, with the exception of the latter were unsuccessful. The balance of the monograph is devoted to the methods, etc. of experimental enucleation and transplantations on rabbits and other animals.]

Successful Transfusion in typhoid fever; report of a case by William S. Whitwell, M. D.; Reprint from the *Pacific Medical and Surgical Journal*, for April, 1886. [Intravenous injections of salt water were attempted but brought on collapse, which lasted for several hours. Subsequently transfusion was performed, five ounces of blood being transfused from the nurse. The apparatus used was a Davidson syringe from which the valves had been removed. The patient immediately rallied and subsequently recovered.]

Ethics of Female Sterility, by A. Reeves Jackson, M. D. Reprint from the *Physician's Magazine*. [The author sums up as the causes of sterility the following incapacities, viz: for insemination, for impregnation, for ovulation, and for gestation. He then treats each incapacity, seriatim. The latter part of the article is a discussion of the conditions which should justify treatment for sterility, and of the question of the morality of the resort to artificial impregnation.]

The Destruction of our Native Birds. Bulletin No. 1, of the American Ornithologists' Union. [This is an indignant protest against the slaughter of harmless and beautiful birds as carried on, not by pot-hunters, murderous and gluttonous as they are, but by men hired to murder [the innocents in order to gratify female vanity and love of finery. We wish that the bulletin before us could be placed into the hands of every woman in the land. If educated and refined women would but abandon the practice of wearing birds, the servant girls, shop girls and that class would soon follow suit. Copies may be obtained by addressing the Committee of the Ornithologists' Union, American Museum of Natural History, Central Park, N. Y.]

Bolletino della R. Accademia Medica di Genova. Nos. 1 and 2 for 1886. [The Royal Academy of Medicine of Genoa commenced the issuance of regular bulletins only last year, and the numbers before us are the first of the second volume. The table of contents show that the Academy is in a vigorous and prosperous condition and doing good work. The most noticeable thing about these publications, when they are placed along side of the bulletins emanating from other and similar institutions, not only in Italy but throughout Europe generally, is the beautiful typography and very superior paper used by the Genoese Academy.

Melange.

THE St. Louis Medical Society has adjourned until the third Saturday in September.

THE Southern Illinois Medical Association will hold its next meeting at Carbondale, Ill., on the third Thursday in November.

THE MISSISSIPPI VALLEY MEDICAL SOCIETY, (formerly Tri-State) will hold its regular annual meeting at Quincy, Ill., July 13, 14 and 15. A good attendance is expected and a number of excellent papers have already been promised.

DEATH OF DR. AUSPITZ.—The University of Vienna, and the faculty of that city has recently lost one of its most distinguished members, Dr. Heinrich Auspitz, editor of the *Archiv fuer Dermatologie und Syphilis*, and author of numerous standard works on venereal and skin diseases. The deceased succumbed to heart disease at the comparatively early age of 51. Among the best known of his works are *Die Lehre vom syphilitischen Kontagium* and *Ein neues System der Hautkrankheiten*.

THE OTHER CONVENTION.—One of the most amusing things in connection with the welcome given the members of the American Medical Association by the citizens generally—was a window, piece gotton up by Fraser, the Candy Man, at 602 Olive. He obtained a large number of young ducks, had their skins stuffed and mounted, and seated them in chairs in a little amphitheater. The desk in front of each was marked with a parody upon some quack nostrum, and advertisements of patent remedies graced the walls

Among the delegates was a black duckling, labelled "hoodoo." The whole was entitled "The other Convention." The hit was palatable and enjoyed by the visiting medicos.

POLYCLINIC AND POLICLINIC.—These are two separate and distinct words, meaning different things; yet the first is used by many, indeed, most of our exchanges, when the latter is clearly intended. As thus spelled, it is derived from the two Greek words *polus* (many or multiple), and *kliné* (a bed), and it means a hospital with many beds. The second word is derived from *polis* (a city) and *kliné* and means the clinic of a city—a clinic where any form of disease that presents itself is treated. Hence when we find an otherwise well-gotten-up catalogue announcing a "polyclinic and hospital" we cannot help but think that the writer of it meant to say a policlinic, instead. The difference between the two words is quite as great as that between capitol and capital, yet men use them indiscriminately who would never think of making the error of writing capitol for capital.

QUACKERY IN FRENCH RELIGIOUS COMMUNICANTS.—In a little commune of the Vendée, near the borders of the Department of Deux-Sevres, a rural school-house shelters five or six *religieuses*. The government some time ago ceased to give them any support, so that it became necessary for them to look about for some other means of living and keeping the wolf from the door. After looking around a little, the good sisters determined to make some money out of their knowledge of the medicinal value of the herbs and simples around them and which had hitherto been applied to the gratuitous healing of the ills of their neighbors. It seems that in some manner they had acquired a reputation for curing the goitre and not long ago a peasant, living some distance from them, undertook a journey to their establishment in order to obtain from the charitable sisters the remedy for a goitre which disfigured his spouse. They gave him a box of pills and received in return six francs, and the peasant went on his way rejoicing. As luck would have it, however, the sister who was called to accompany him to the gate and let him out, inadvertently displayed the fact that she was herself afflicted with a great goitre. The patient was sharp enough to see the point and immediately began to bellow that he was robbed. Not getting his money back, he complained to the authorities and thus the matter stands. It has however, served to call attention to the fact that religious communities all over France are doing the very same thing, and not only this, they are using the knowledge and facilities thus afforded them, to the great detriment not only of the medical profession but of the Government itself. Most of these communities are violently anti-republican in their sentiments, and devote their entire time to the quiet *propaganda* of monarchical and clerical ideas. This fact once brought home to the authorities ensures their suppression.

Hydroleine, See Adv. Page 8.

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THE SAINT LOUIS Medical & Surgical Journal.

VOLUME LI.  No. 2.

Original Contributions.

THE USE OF THE ACTUAL OR OF THE GALVANO-CAUTERY, in the
Treatment of Necrotic or Suppurative Ulcers of the Cornea.
By A. D. WILLIAMS, M. D., of St. Louis.

The more recent literature of Ophthalmology, is full of recommendations of the use of the hot iron, or galvano-cautery, for the purpose of cauterizing indolent ulcers of the cornea, and that class of ulcers which are characterized by a constant tendency to extend by sloughing or suppuration of their margins.

The treatment of this class of ulcers heretofore has been extremely tedious and very unsatisfactory. In fact, in many of such cases the process of ulceration would go on in despite of all the methods of treatment formerly employed, until the entire cornea was utterly destroyed.

In many instances pus collects in the anterior chamber, iritis sets in, and the patient suffers excruciating pain till the eyes are hopelessly lost. Every specialist knows how difficult it has hitherto been to manage such cases, and in fact in many instances—particularly in that form of corneal ulcer known as hypopyon-keratitis our efforts seemed to be absolutely impotent.

It is exactly in this class of cases, nearly hopeless under our former methods of treatment, that the value of the thermo—or galvano-cautery—is shown to the best advantage.

Indeed, if we may judge by the uniformity of the commendations coming from numerous writers on such subjects, cauterization of the ulcers with either form of cautery is almost specific in its effects. It seems to be immaterial which form of cautery is

used, but that derived from the galvanic current is the more convenient and hence most generally preferred. If the actual cautery is to be used, a platinum probe or a large needle may be employed as a heat carrier. It must be held in the flame of a spirit lamp or Bunsen burner until a lively red heat is produced, at which point it is ready for use.

Another very convenient form of heat carrier is what is known as the thermo-cautery—an apparatus so contrived that the requisite degree of heat is quickly attained, and can be maintained at an uniform point for an indefinite time. The galvano-cautery is ready for use the moment that the battery is set into action.

The method of applying the cautery is very simple. The eye should be first thoroughly cocainized. When anaesthesia is complete the lids are separated, the ball held firmly with the fingers, and the cautery quickly applied to the surface of the ulcers. The application must be made lightly and rapidly, since superficial cauterization is all that is required; though no absolute rule can be made in this latter respect, as each individual case presents a separate problem to the physician, and he must judge how much or how little the ulcer should be burned.

The whitish or yellowish points of infiltration or deposition on the surface of the ulcer must always be touched. The clean portion of the ulcer, on the contrary, should be let alone. A bare touch of the cautery is all sufficient. It must never be forgotten that the cautery,—and the galvano cautery especially, will go through the corneal substance as a hot iron does through snow. Cauterization should be repeated from time to time until the ulcers take on a healthy healing action.

The theory upon which the curative value of the cautery is based, is that the ulceration is due to specific microbial germs. The object therefore in the application of the heat is the destruction, not of the necrotic material on the surface of the ulcer (material too dead to revivify and live, and too much alive to die), but of the micro-organisms which infect the cornea and cause the ulceration. In other words the ulcer is sterilized by the aid of heat, and placed in a condition where the natural reparative tendency is not neutralized by destructive organisms.

Prior to the introduction of the actual cautery, I have often caused such ulcers to heal by touching their surfaces with pure carbolic acid, and in one instance at least I successfully used

chromic acid for the same purpose; but the actual thermo or galvanic cautery is far superior in every way, and is to be preferred in all such cases.

Finally I would remark that the introduction of cocaine has made the use of such radical measures as the actual cautery as a therapeutic agent in ophthalmology, a possibility, and renders the operation not only easy of execution but painless. Without this anæsthetic agent there could be but little, if any, general resort to the hot iron or galvano cautery in the treatment of these dangerous affections of the cornea.

SOME REFLECTIONS ON THE PRINCIPLES OF MEDICINE,—By HIRAM CHRISTOPHER, A. M., M. D., of St. Joseph, Mo.

The aid that skilled interference can afford, should be directed to the same end that the organic force is aiming at—the elimination of the morbid poison and the products resulting therefrom, and the relieving the vital cells from their exhaustive task, by setting others to work not yet engaged. It is important, therefore, to determine, if possible, what organs are engaged in the work of elimination, and which are not. The organs most likely to be engaged in such work, if we may safely judge from the morbid phenomena present, are those whose action give rise to the phenomena, or in which the phenomena appear. Judging from these it is evident that the nervous system is involved in both the animal and organic departments since there is increased circulation as manifested by fever, and pain and languor in the muscular system; more important still, there is a disturbance of important functions, as those of the digestive system. It is also equally important to determine to which organs remedies should be addressed, and these will be found to embrace both those the more immediately affected and those participating through sympathy or from secondary impression. An illustration may better serve to explain my meaning. We have a meningitis in hand. The inflammation is high, and other concomitant symptoms harmonize with the inflammatory action. The inflammation being acute the usual products of such action appear. The cause what-

ever it may be, excites this diseased action in the meninges of the brain; and all that the life-force does to resist this action is apparent only in of the fever and the products of inflammatory action, which are generated by the living nutritive cells of the tissues involved. But as this disease is most frequently destructive, the work of these cells is not enough to subdue the inflammatory action; and when we employ remedies they are directed to the same end. We reduce the inflammatory action by reducing the quantity of blood flowing to the part; and this may be done by the extraction of blood, or in milder cases by purgation. The quantity of blood being reduced the inflammatory action subsides in proportion to the relief afforded. When this is done by purgation, the secretions of the alimentary are increased. These emunctories, not excited to action by the disease, but by remedial agents draw away blood from the brain, and aid in the work of diminution, and at the same time create a diversion which can be controlled—one that allows the suffering organs a relief from their arduous task of resistance, and their nutritive cells of the severe work of elimination.

Inasmuch, however, as the products of cell-action under the excitement of inflammatory action are also calculated to do injury in the parts suffering, a remedy should be used if there be such, which will not only divert by purgation, but also arrest the production of inflammatory products by its control of such diseased action. Hence, as the mercurous chloride not only purges, but also arrests the deposition or production of coagulable lymph, which arises from the inflammatory action, it evidently is clearly indicated. This salt has the property not only of preventing the generation of this product, but of producing its absorption after it has been deposited. I do not stop to cite proof of this statement. The fact is one of actual observation in my own experience.

In the case of a remittent fever, there is no inflamed organ which is the cause of the fever; but some morbid agent excites general fever, with a tendency to local congestion and irritation through the impression which the morbid agent makes either directly or indirectly on an organ in the body. When such irritation becomes so great as to become an excitant to the fever existing from a common cause, then the case becomes more complicated than when a local inflammation alone occasions fever. When such complication occurs, evidently the indication is to

remove the local trouble first, in order that the amount of diseased action which it occasions, may be out of the way, when the results of the action of the primary morbid agent are to be remedied by means which our knowledge of the action of remedies clearly indicate as calculated to accomplish such a purpose.

Complications were once much more frequent in remittent fevers than at present. Then the fever was sthenic, active and sometimes violent, putting a great strain on the vital organs of the body in its resistance to the destructive tendencies of the disease. Then congestions were not unfrequent—sometimes in the lungs, sometimes in the heart and head, but more frequently in the digestive system. A half century ago bilious remittent fever very frequently terminated the life of the patient, even under the most energetic treatment. Blood letting was then demanded; a plethoric habit under the sway of such a fever called for rapid reduction of the consuming agencies of the disease. Purgation was too slow, though it was a necessary adjuvant. The disease subdued, the patient as a matter of course was left prostrate. It may be said *now* that such a result was to be expected after such heroic treatment. If such a treatment were applied to the modified remittent common at the present day, the remedies would doubtless prove more destructive than the disease. But few seem to know the reason why, or to know that the remittent of to-day differs at all from the remittent of a half a century ago.

We not unfrequently hear general blood-letting derided, as though it never was indicated in the treatment of inflammatory affections. Some very gross ignorance is presented on this subject. It is forgotten that *principles* never change. If the use of the lancet were ever indicated as a necessary remedial agent, evidently it was indicated in strict accordance with the principles of the healing art; so that they who deny the use of the lancet must regard the art as having no fixed principles, or that principles change, or that no one but themselves know what the principles of the science are. Most men are superficial in their thinking, and hasty in drawing conclusions; it is logical and careless observers who mistake a *post hoc* for a *propter hoc*. There is no field of thought so prolific of such mistakes and such self-deception as that of the practice of medicine; and there is no field that requires more careful observation and severity of thinking and reasoning than that of medicine. But few bring to its study a mind trained to thought; a lack that is never compensated for

in practice by close study and reflection. The best minds find at length necessity for the greatest care against self-deception. They become impressed by experience with the importance of distinguishing fact from phenomena and disease from symptoms. It is only by judicious sifting of facts and phenomena that one's observations, experience and judgment become reliable.

It is but rarely, if ever, I presume, except possibly in warmer climates that general blood-letting is indicated at the present day for inflammatory action, unless in a severe meningitis. There is a reason for this. A change has taken place, not in the principles of medicine, but in the normal powers of the organism. This change as far as my reading extends, is mentioned by no author since the days of Watson's Lectures. When speaking of general blood-letting, and the indications for its use, he cautioned the class to be extremely careful as respects the quantity of the blood to be taken in a given instance; and as a reason for this caution he stated as a fact that the human organism was less tolerant of the loss of blood since the cholera epidemic in 1832, than it had been since, or was then in 1836. As a reason for the fact, he states that cholera had so impressed the organism as to enfeeble its powers, and make disease in general wear the form of debility in contrast with the sthenic form, prevailing before the appearance of cholera. My own experience and observations since the epidemic of 1849, and 1866, in St. Louis, Mo., fully confirmed the truth of this statement. The sthenic form of disease has been changed to the asthenic, and a corresponding change of treatment was consequently necessary. Remedies adapted to sthenic diseases are of course improper in the asthenic. Hence, as high inflammatory fevers no longer prevail, remedies once so necessary in such diseases have ceased to be necessary, and hence are not used. Milder measures control the more sthenic of the present, and sustaining remedies are demanded for the asthenic form. This principle of medication has always prevailed, and the practice based on it has always been proper and rational. The changes therefore which have taken place in the treatment of diseases have grown out of the changes which have taken place in the form or character of disease. Principles being immutable, the rational use of remedial agents must always conform to these principles. This truth will be found cropping out in the treatment of all forms or kinds of disease.

The remittent bilious prevalent in the temperate zone is much more manageable than that which prevails within the torpics, where the morbid agent makes a more profound impression, and leads more rapidly to an aplastic state of the blood, which manifests itself in hemorrhages from different organs of the body. A typhoid state supervenes as shown by the presence of its characteristic symptoms, when the remittent bilious in the more northern latitudes terminates fatally, it ends in a typhoid state. In the fall of 1853, when many cases of yellow fever were quarantined on Arsenal Island in front of St. Louis, a majority of the patients were in a typhoid state when I visited the hospital in company with the resident physician.

Assuming that malaria, or a common morbid agent is the cause of bilious remittent fever in the more northern latitudes, presenting a somewhat uniform class of morbid phenomena; and also of the graver forms which approach and reach the type of continued fever in the warmer latitudes, we find that a physical agent co-operates with a morbid agent in producing the several grades of the same fever. This agent is heat, which co-operates with the heat of the fever resulting from excessive cell action. Besides the morbid agent on account of a greater quantity, may be regarded as producing a profounder impression on the system, on account of which changes take place in the blood through both the action of the morbid person and the character of cell products, which resulting from abnormal action of the cells, are themselves more or less deleterious to the living matter of the organism. Thus, at length the blood becomes aplastic and depraved in vitality, giving rise to that series of morbid phenomena which appear in these destructive fevers.

This condition of the blood is manifested by a characteristic pulse. It is in marked contrast with the pulse of a bilious remittent. In the latter the pulse is full, strong and resisting, more frequent at one part of the day than at another, the fever exacerbating and running high generally in the afternoon. Other symptoms are consistent with this change in the fever and pulse. In the former the pulse is uniform in frequency throughout the day, ranging from 108 to 116, as the patient improves or deteriorates. But whatever the frequency may be as the disease goes on to its close, it so continues throughout the day—the same morning, noon and night. The pulse at the same time is full, soft, round and unresisting. Pressure obliterates it. It is such in the beginning of

the fever, and is indicative of the character of the coming fever, viz: continued. If the party be bilious at the time the fever sets in, the pulse *then* will be characteristic of this condition; but soon loses it under a calomel purge, to return no more before the fever has fully set in, and gives the fever its true continued type. It is also to be observed that a bilious remittent, if not actively and properly treated at the beginning, and especially if the hepatic derangement be marked at the time, will not be long in showing that it is assuming the continued form, with its characteristic morbid phenomena. Hence, fevers with hepatic derangement, if not treated for this at the first, if severe will degenerate into the continued form, and generally of a typhoid character, and very probably will terminate fatally. This is the so-called Typho-Malarial fever; but just as improperly as to designate a Yellow fever Typhoid, because the patient dies in this state.

TOBACCO SMOKING AND PULSE-INTERMITTENCY—The Relative Depression caused by Smoking and Chewing;—Overworked Clergy and Tobacco:—A summer colloquial note on these subjects. By C. H. HUGHES, M. D., of St. Louis.

The comparative relationship of smoking and chewing tobacco to depression of the medulla ganglionic system, has often come forcibly to my mind in the study of influences of depression on the central nervous system, but the recent death of Robert Gibson, in this State, in the one hundred and twentieth year of his age, who has always been a moderate chewer, confirms anew the long standing conviction that it is from smoking chiefly, that the greatest depression of tobacco is caused. And this is probably mainly due to augmented potency through nicotine volatilization, and perhaps likewise possibly due to the generation and inhalation (in closed rooms especially) of the hydrocyanic acid produced during the smoking process, as has been asserted, hydrocyanic acid having been detected in the atmosphere of smoking rooms, though how it is found, I do not understand.

At all events it is a clinical fact that tobacco smoking is far more depressant to the inhibitory and ganglionic nerve centers than tobacco chewing. This is one of the incontestible conclusions of

experienced observation, which any one may verify who will take the pains to note carefully the different results of regular or occasional tobacco using, in these two forms separately. It is the chronic tobacco smoker who is especially the victim of intermittent heart beat, though the depression from tobacco chewing in this direction is not to be denied. Excess is easier to the tobacco smoker because it is an additional form of use, and many smokers are also chewers.

It may be said also of the tobacco chewer, that central nerve tolerance, once established, is maintained by continuous use, whereas the ordinary smoker has longer intervals in each day in which he is not and can not well be (without interference with business), under the influence of tobacco. Tolerance grows strong, perhaps, through its being made a constant vital necessity.

But the fact stands out boldly, in spite of all argument to the contrary, that the first use of tobacco or the occasional use of tobacco by smoking is more relaxing to the central nervous system than chewing.

The novice who will be no more than nauseated by chewing, will have relaxed bowels if he smoke a single cigar, and the last end of that cigar is proverbially more than the first, and this fact of the relaxing effect of tobacco smoking may be utilized as it has been therapeutically, in breaking up the habit of constipation. In the early history of the tobacco craze in England, shortly after Lord Raleigh introduced it into that country from Virginia, recently revived in the secular press as something new, tobacco was used as a common laxative by enema, and by smoking, and the use of tobacco clysters is still retained in veterinary surgery to this day.

A recent letter from an octogenarian friend who has been a chewer all his life, but in whom two cigars smoked five years ago brought on an intermittent pulse, which after its subsidence was renewed by the same indiscretion, and disappearing again upon ceasing to indulge in smoking, is only cumulative testimony of what may be observed by any one who will take the pains to study tobacco users of these two forms, whose nervous health has failed at all under the use of the weed. A literary friend has just told me that he has reached the same conclusion from his own personal experience relative to the use of tobacco in these two forms, that he cannot smoke any more because of the cardiac failure following smoking which does not appear under daily chewing.

Intellectually habited men who, in a state of nervous erethism due to over mental strain and loss of sleep, take to tobacco as they would take to anything as a diverting nervous impression, they might deem morally harmless, simply to make a new impression in an overworked and monotony-worried nervous organism, present the phenomena of cardiac intermittency so often that even of those whom I do not know to be smokers, I ask about this excess and find much to their surprise, that the aberrant heart phenomena had followed the "few" or occasional cigars smoked, though they had not regarded the heart failure as the consequence.

Abstemious and exemplary divines are prone, when *ennui* or overtax is on them, and when they want a rest in the woods or a lodge in the wilderness, or by the sea, to seek a quiet smoke, in lieu of the real recreation nature is crying for in the open air, and diverting solitude far from the arena in which they can not be without fighting constant battles against foes formidable and vigilant, in the face of which no conscientious minister of the Gospel can "in these degenerate days," rest complacently, while he thinks he still has power to "fight the emboldened pests of Satan.

But the saints of God need rest as well as sinners, and if the fiends in the inferno ever rejoice, it must be when they see a devout minister of the Gospel of Jesus inspired by an enthusiasm which incites to ceaseless activity beyond the limits of mortal strength, regardless of the limits of his physical power, fighting unto his own death and helping the end to come more speedily by the aid of those deceitful and unreliable reliances, rum and tobacco.

I put this in the form of a free flowing letter because it is too hot for a vigorous, painstaking, calculative paper on the subject such as would *convince* others, but it may set some one more willing than I am to wear himself out while the thermometer is in the nineties, to either confirm or confute these statements.

To think coolly in hot weather, a man should rather briefly record the conclusions of previous cold-weather thought and observation, than to belabor his audience with labored calculations and accumulated statistical showings.

This is the ice cream and lemonade season of medical work, when what a writer offers should be agreeable to take and not difficult to digest. I hope your readers may find this so.

LIGATION OF THE VERTEBRAL ARTERIES; a Physiological Experiment upon the Human Subject. By AUGUSTUS C. BERNAYS, A. M., M. D., M. R. C. S., (Eng.), Professor of Anatomy St. Louis College of Physicians and Surgeons, of St. Louis, Mo.

The cerebral regulation of the respiratory and circulatory organs has been a favorite field of investigation with physiologists. Several theories have held sway for a certain length of time, only to be overturned by the observations of later workers in the field of experimental research. If anywhere it is in this field that vivisection and animal experiments have produced brilliant results.

We have no reason to cast aside or to place in doubt the current doctrine that the centres of automatic respiration and of circulation (pulsation of the heart) are situated in the medulla oblongata. The automatism of the centres in the medulla oblongata is maintained principally by the irritation of these centres, a lack of oxygen or a surplus of carbonic acid acting as the irritant cause.

These centres being irritated by the condition of the blood, the result is a rythmical play of the muscles of respiration and of the heart.

We know perfectly well that the heart's action is governed by certain sets of nerves coming from the medulla. Their courses and exact mode of action have been well determined by physiological experiments, and I need not here explain the action of the pneumogastric nerve and its antagonist, the sympathetic, upon the heart's action.

On Friday, July 9th, 1886, I was called on by Dr. W. B. Hazard to see a patient who was suffering from epilepsy and I was asked to perform the operation of ligating both vertebral arteries. An accurate account of this case from a surgical and pathological point of view will appear in "*Progress*". For our present purposes the following notes will suffice. The boy is eleven years old, constitutionally in no way tainted; of a rather low degree of education perhaps owing to his having been subject to epileptic fits for the past seven years. These fits were sometimes very frequent in their occurrence, as many as one hundred and fifty-two attacks having been observed within twenty-four hours by his parents, who are of rare intelligence, and close observers of their son. I will say here that the operation of tying the vertebral arteries has been done twenty-one times by Dr. Alexander, of Liverpool, Eng., and

five times in Chicago, with very encouraging results, in bad cases of epilepsy. I considered the operation not a very dangerous one, although somewhat difficult and tedious of performance, owing to the great depth of the arteries in the neck, and the careful dissection required to find them. The father thoroughly understood the experimental nature of the operation, and accordingly on the day named, with the assistance of Drs. Hazard, Ohmann-Dumesnil, Luedeking, Bernays, Sr., Kleineke, A. F. Bock and others, I had the patient chloroformed in the operating room of St. Luke's Hospital at three o'clock P. M. The right artery was ligated first, the operation being quite tedious, on account of an abnormal position of the vessel, and because some veins which form a dense plexus immediately around the vertebral column were torn, causing a troublesome hæmorrhage. The left artery was quickly found and ligated; it was nearly double the size of the first one. The wounds were closed by sutures after having been thoroughly disinfected and cleansed with a one-tenth of one per cent solution of bichloride of mercury. The immediate effect of the operation was carefully noted by me at my visit at 9 o'clock P. M., three hours after the ligation. The boy was deeply unconscious, *his pulse was one hundred and forty to one hundred and fifty per minute*, his respirations numbered *from fifty to sixty per minute*. The pulse was full and strong, not in the least alarming, and was regular (not intermitting) as were also the respirations. His temperature was 102°F. On Saturday morning I visited the patient with Dr. Quigley and we found the temperature 100½° the pulse one hundred and thirty, respirations forty to forty-five, patient had regained consciousness. At the evening visit, temperature had fallen to 99½° pulse one hundred and twenty-six, respirations forty. Morning of the third day temperature 98.8°, pulse one hundred and twenty-four, respirations 40. Evening, temperature normal, pulse one hundred and twenty-four, respiration thirty-four. With but few variations towards the normal condition, the pulse remains higher than one hundred and ten, respirations over thirty, up to the present, the tenth day after the ligation. The patient is up and dressed, can walk and talk, as well as ever, has a good appetite. The wounds are nearly healed, the ligature upon the right has come away. He has had no attack of epileptic fits since the operation.

The remarkable effect of the ligation in my case was the very high pulse and respiration, while the temperature was not high, considering the wounds, which healed nicely.

I will mention that in Mr. Alexander's cases the temperature always rose to 102 or 103, immediately after the ligations, but quickly became normal, *the pulse and also the respiration remaining very high.*

In the light of these experiences I think the following must be stated as the result of the experiment:

THE LIGATION OF THE VERTEBRAL ARTERIES CAUSES AN IMMEDIATE AND VERY GREAT ACCELERATION OF THE HEART'S ACTION AND OF RESPIRATION.

Let us now examine into the causes of this fact. We know that the vertebral artery, besides numerous minor branches to the neck, is principally distributed within the skull to the cerebellum, and to the medulla oblongata, previous to forming the basilar artery and entering into the circle of Willis. We know that the principal supply of blood for the medulla oblongata comes through the vertebral arteries.

The ligation of both vertebral arteries must necessarily diminish the afflux of blood to the medulla oblongata until the collateral circulation can be established. It seems to me very likely that the blood supply can not be perfect for a period of several weeks, perhaps even longer; or it may be permanently lessened. The channels which afterwards supply the blood to the medulla will be derived chiefly from the carotid.

It was shown above that physiology at present teaches the regulation of the automatism of respiration and circulation to be dependent upon the character of the blood supply to the medulla oblongata and particularly to the central gray nuclei of the pneumogastric nerve, near the calamus scriptorius, at the base of the rhomboid fossa.

In our experiment we undoubtedly diminished the blood supply, consequently an anæmia of the nerve centres, a lack of oxygenated blood, was produced in the province of the vertebral artery. The result was a very high pulse and an enormous increase in the number of respirations per minute.

In conclusion, I wish to express my gratification at being able to support our current and accepted theory, the work of careful and tedious study in the vivisection room and laboratory, by an observation upon the human being. I feel fully aware that while this experiment is by no means free from sources of error, the more exact inquiry into this matter and the weight of this corroborating observation will be properly estimated by those who have made neuropsychology a special study.

Clinical Reports from Private Practice.

EXTRACT OF MALT IN AGALAXIA.—By THEO. A. WAGNER, M. D.,
of Indianapolis, Ind.

The patient, the wife of a physician, was delivered on May 17th, and on the second day thereafter was seized with puerperal convulsions. For five weeks she had from one to four violent rigors daily, the temperature in the meantime varying from 100. 4° F. to 106°F, leaving her finally in an exhausted and helpless condition, with barely a trace of milk in the breasts.

June 27, after an almost exclusively milk diet she had no appetite, and digestion was very much impaired. On this day she was given fluid extract of malt—the preparation being that known as “Nicholson’s Liquid Bread.” She relished it, and up to date (July 6th) has taken twelve bottles—or about one and a half bottles per diem. To-day her appetite is excellent and the patient is gaining flesh in a manner that is simply wonderful. She is able to nurse her child and give it nearly as much nutriment as it desires or is necessary for it.

July 12th. The secretion of milk is rapid and abundant, the baby now relying entirely on its mother’s milk. The patient continues the use of the Liquid Bread and to relish it. Indeed she could hardly do otherwise since it is the most agreeable preparation of malt that has ever come under my notice, and it seems to go “right to the spot.” Drs. Chambers and Newcomer, the consulting physicians authorize me to express their commendations and satisfaction with the results of the Liquid Bread.

1886.]

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ERRATA.

The mechanical work on the July number of the JOURNAL was executed under unusual difficulties—the sudden and very severe illness of the head of the firm being one of them, and as a consequence a large number of typographical errors was the result. Most of these, however, are self-evident and require no explanation. We promise our readers that it shall not occur again.

“PROGRESS.”

The first (July) number of Dr. Dudley S. Reynolds' new venture in medical journalism, bearing the above suggestive title, has at last come to hand and finds a place ready for it upon our exchange table. It is a handsome forty-eight page, double column monthly, full of matter of interest to “students and practitioners of medicine,” to whose use and benefit it is formally dedicated. Dr. Reynolds is not a novice in medical journalism. Louisville has many distinguished physicians, but none of them are better known, or more highly esteemed, at home and abroad, than he. What he writes, and what he selects from the writings of others, will always be well worth reading, and therefore we predict for *Progress* a long and successful career. At any rate we know it will deserve success, which is sometimes better than achieving it, and the St. Louis MEDICAL AND SURGICAL JOURNAL, the oldest medical monthly in America, tenders to *Progress*, the youngest, a hearty and sincere welcome. *Semper sit in flore!*

SPONTANEOUS CONVERSION OF MORPHINE INTO
APOMORPHINE.

The *British Medical Journal* of a recent date chronicles an instance where a portion of a solution of hydrochlorate of morphine was spontaneously converted into apomorphine. The solution had been prepared for hypodermic injection, and when fresh, produced the physiological effects of morphine. After standing nearly a year it was again resorted to, and the exhibition was followed by violent and continued vomiting. An analysis revealed the fact that it contained apomorphine, the inference being that a portion of the morphine had in the meantime undergone a spontaneous chemical conversion into that alkaloid.

This observation is not a new one. As long ago as July or August 1884, the writer called attention (in the Therapeutic Department of the *National Druggist*) to the possibility of such a change and suggested that whenever the exhibition of an old solution of morphine was followed by emesis or nausea, the cause would probably be found in the decomposition of the morphine with the formation of apomorphine as a result.

It is probable that this change takes place only in solutions of the hydrochlorate of morphine, and even then only when there is an excess of hydrochloric acid,—though the exact method of the change is not quite clear. Apomorphine ($C_{17}H_{17}NO_2$) is produced when morphine ($C_{17}H_{19}NO_3$) is heated to $302^{\circ} F.$, under pressure, and in the presence of an excess of HCl. Under these circumstances morphine parts with one atom of water and the new base is formed.

In cases like that quoted by the *British Medical Journal*, the change is most probably brought about through the action of light. This agency is most potent in the decomposition of apomorphine, not only in solution but in its crystalline condition. Indeed, one of the chief objections brought against apomorphine is its instability under ordinary circumstances. It is almost impossible to keep it for any length of time where even faintly diffused light has a chance at it. A curious instance of the effect of light upon apomorphine is related in the *Archives de Pharmacie* for March 1885. A specimen that had been kept in a brown bottle and remote from the action of direct light, decomposed and gave on solution a green fluid which became red on the addition of hydrochloric acid. The specimen, or

rather the balance thereof that was not made into solution, was transferred to a blue glass bottle and carefully put away in absolute darkness. After some weeks it was again examined, and on test gave a perfectly clear solution. It had apparently resumed its former chemical state.

But for all this, apomorphine is one of the most valuable drugs in the pharmacopœia, and it is very singular that it has not come into more general use in practice. The writer was probably one of the first in America to prepare and use it, and he can truthfully say that he has always found it prompt, reliable and effective. Looking back through fourteen or fifteen years during which he has used it, the most striking instances of the power which a knowledge of medicine confers on man, were due to its influence when administered hypodermically.

WHEELING INTO LINE.

At the late meeting of the American Medical Association the Judicial Council announced that the credentials of the Mississippi Valley Medical Society would not be received. This was naturally to be expected, as that society organized and met without having adopted any constitution or by-laws and, moreover, had not regarded the code of ethics as necessary for its government. It has been claimed by many that, on account of this action of the American Association, and for some other reasons, the meeting of the society at Quincy was not the success it was expected to be. This may be true, and no doubt, this fact aided in a great measure to decrease the attendance. There was another potent factor, however, and that is the almost unanimous opposition which the society has had from the East. Put it as they may, our Eastern *confrères* cannot deny that they have no love for their Western brethren, and the great success of the Mississippi Valley Medical Association aroused them to display their opposition. They have not failed to embrace the opportunity and have taken advantage of the fact that the society was, in a certain measure, in an anomalous position. It was governed neither by the old nor by the new code, and therefore became the legitimate prey of all those who wished to pounce upon it.

It was claimed by some that it was this very fact, that no written law existed, that contributed to the early successes enjoyed by the society. Nothing but legitimate scientific work was done and a great deal of that. Not a moment was wasted upon matters legislative or ethical. Those who came to learn and to teach had full opportunity to do so and all went home satisfied with the work done.

At the Quincy meeting it was deemed an imperative necessity to do something that would set the Society upon a definite basis; since it was plain that unless this were done this would be the last meeting the Society would ever hold. And something was done. The Society "wheeled into line." The code of ethics of the American Medical Association was adopted and a committee appointed to draft a constitution and by-laws. The members of the Society have drawn a long sigh of relief now that the Rubicon has been crossed and are firmly convinced that it has obtained a new lease of life. It has already been predicted that the meeting at Crab Orchard Springs, Ky., next year, will be the most successful one in its history. We sincerely hope that it will be. We have always had a great interest in this medical body and in the men who compose it, because they are animated by an earnest desire to further the cause of scientific medicine and because they have always shown themselves conscientious workers in that field.

We do not think that the adoption of the code of ethics can possibly do any harm to the scientific work of the society, if the precaution is only taken to make committees take charge of all matters coming under that head. The fact that there always will be members more or less personally distasteful to each other, will without doubt occasionally bring about charges and counter charges, and if such things be allowed to fritter away the valuable time of the society, then the adoption of the code might be regarded as anything but a blessing in disguise.

We are glad, however, that the Mississippi Valley Medical Society has adopted the code of ethics. It was challenged and it ran up its flag and is now ready to fight with its colors nailed to the mast. The little flings that have been thrown at it can no longer be serviceable to those who have endeavored to assail it. It can now proudly sail with the older ships and show them that it is fully able to sustain its share of the battle and lead on to victory with flying colors. And should it be called, it will not only "wheel into line" but it will go in advance and lead in triumph.

Medical Progress.

THERAPEUTICS.

Narceine as a Hypnotic—and in Whooping Cough.—

Something over a year ago the writer suggested in the *National Druggist*, and afterward in the *JOURNAL*, the use of narceine as a hypnotic and gave his experiences with it in the treatment of whooping cough. Since that time he has frequently used it, not only as a hypnotic, pure and simple, and in whooping cough, but in asthma and to allay spasmodic coughing in other complaints, and has found it to be one of the most valuable of the opium alkaloids. For allaying the paroxysms of whooping cough it has no equal, and once tried it will be used to the exclusion of all other antispasmodics. In this opinion the writer finds himself sustained by no less an authority than M. Laborde, who at the séance of May 29th, 1886, of the Société de Biologie, said that he considered it the best of the hypnotics, and recommended its administration in the shape of a syrup, as follows:

R Narceine,.....grs. 4,
Simple syrup,.....38,
Citric or acetic acid enough to dissolve. M.

Each tablespoonful of the solution represents $\frac{1}{4}$ grain of narceine, which is a full dose for a child of 10 or 12 years. For an adult the dose is from 2 to 3 tablespoonsful. It relieves almost instantly the paroxysms of 'whooping' and procures a calm and natural sleep. It may also be exhibited in pill form or in suppositories.

Narceine.—The *Dublin Journal of Medical Science*, commenting upon Brown-Sequard's statement that this alkaloid has the property of increasing the flow of saliva, and of altering the viscid expectoration of bronchitis, remarks "that there seems to be a great difference of opinion as to the therapeutical action of narceine,—many observers attributing hypnotic powers to it, although some deny that it has any such effect." Having used the alkaloid for several years in the treatment of whooping cough, I think that there can be no question as to its hypnotic properties. It is true that they are not so well marked and powerful as

those of some other alkaloids of opium, but they exist without doubt. As an antispasmodic in whooping-cough the drug is, as I have frequently pointed out, simply invaluable. The dose for an infant of two or three years is from one-tenth to one-sixth of a grain, given at bed time and occasionally, where the disease is very severe, during the day. It is best administered in syrup. M. Laborde, who has recently called attention to its value in the treatment of whooping-cough, recommends that it be dissolved in water by the aid of acetic acid. As the alkaloid is very sparingly soluble in water, even with the aid of acetic acid, I have been in the habit of using hydrochloric acid, which has a much more powerful solvent action. My formula, as published in the *National Druggist*, about two years ago is as follows:

Narceine.....	grs. viss
Distilled water.....	3 vi

Heat nearly to the boiling point and add hydrochloric acid, drop by drop, until the narceine is dissolved. Add sufficient syrup of orange peel to make 8 fluid ounces. Each dram of this contains one-tenth of a grain of narceine. The dose for children of from 18 months to 3 years is a teaspoonful. In asthma and bronchitis the dose for adults is from one to two tablespoonsful according to the severity of the symptoms.

Therapeutics of Delirium Tremens.—Professor Leudet, of Rouen, in a valuable article in *La Normandie Médicale*, gives a resumé of twenty-two years hospital practice in the treatment of *delirium tremens*. He says that long ago he gave up the indiscriminate use of opium and its alkaloids, as doing more harm than good. The mortality, which while using opium was 16 per cent of all cases received, fell to 6 per cent after the abandonment of the routine opium treatment. In the commencement of an attack he now makes use of an infusion of quinquina (from 60 to 90 grains to the pint). This is given freely, is well borne and seems to cut short an attack. Bromide of potassium and chloral hydrate are both valuable drugs, rendering real service in quieting nervous symptoms and producing sleep. The professor concludes with Gairdner, that where opium is used to the extent recommended by some practitioners the patients as frequently succumb to the toxic effects of the remedy as they do to the delirium itself.

Sodium Benzoate in Erysipelas.—Dr. Haberkorn calls attention (in the *Centralblatt fuer Chirurgie*) to the great value of benzoate of sodium, exhibited internally in the treatment of erysipelas. He administers the salt dissolved in seltzer-water or some mucilaginous vehicle, to the extent of 5 drams daily. He claims that within 24 hours the temperature will fall to the normal and the local lesions commence to heal. Out of 50 cases reported by him he had only two failures and these were due to the fact that the patients could not take the remedy.

A new Remedy for Warts.—Under this head a Russian physician, Dr. Subtschanioff states, in *Rusk. Mediz.* that warts washed with the tincture of *thuya occidentalis* will, in the course of two or three days, dry up and fall off. This is by no means a new remedy, as the expressed juice of the *thuya occidentalis* or American arbor vitæ, has been used for this purpose time out of mind. This does not alter the fact that the remedy is a good one, and deserves to be better known.

Arecane.—M. Bombelon has separated from the betel nut a liquid alkaloid analogous to nicotine, to which he has given this name. The new alkaloid has an odor similar to beef broth, and a strong persistent taste. It is apparently the active principle of the well known masticatory (areca or betel nut) and will probably be found useful in the class of diseases which are benefitted by caffeine, theine, etc. It diminishes the frequency of the pulse and has a laxative effect upon the bowels.

Piliganine.—This name has been given by Bardet to a new resinous alkaloidal base, derived from *Lycopodium Saussurus*, a common Brazilian plant closely allied to the well-known lycopodium of Europe (*l. selago*). It is an emeto-cathartic of great power and high toxicity. Experiments are now being conducted to determine its exact therapeutical and physiological effects, and Dr. Bardet thinks, from what he has already learned, that the new alkaloid is destined to be quite an acquisition to medicine.

Urethane.—This comparatively new synthetic alkaloid seems destined to keep the place that it so suddenly assumed among the best and most certain of the pure hypnotics. Drs. Curt. Huebner and George Stickner have just made an extended report (in the *Deutsche Medz. Wochenschrift*) of its use and behavior in the

Clinic of Riegel and are unqualified in their commendation of it. They claim that it has no unpleasant or dangerous sequelæ and that in doses of from 1 to 3 grams (16 to 48 grains) it promptly produces physiologic sleep.

PHYSIOLOGICAL AND PATHOLOGICAL NOTES.

Bacterial Origin of Pelagra.—Professor Cuboni has recently presented to the Royal Institute of Venice, a memoir upon this subject in which he confirms the discovery, hitherto announced by Professor Majocchi, attributing pelagra to the *bacterium maidis*—a bacterium found in blighted indian corn. The bacterium was found in the blood and urine of those suffering with pelagra, but not in such enormous quantities as in the feces. For years it has been known that pelagra existed only in those districts of Italy where maize was cultivated; and so convinced were Italian physicians that there was a direct relationship of cause and effect between the corn and the disease (otherwise known as Italian elephantiasis) that twenty years ago at least, they gave the latter the name of *raphania maiztica*. At this time the disease was attributed to the fungus *sporisorium maidis*. The theory never acquired much prominence because in America and elsewhere, where maize is extensively cultivated and subject to blight in the same manner as in the Province of Milan (where pelagra is most frequent) the disease is comparatively unknown.

Peptones in the Urine.—According to M. Jolly whenever an urine decolorizes Fehling's solution without producing a precipitate, the decolorization is due to the presence of peptones. This statement has passed without challenge and been widely copied in English and American journals, but for all that, the presence of peptones in urine has never yet been proven. A true peptone will not reduce copper from an alkaline solution. It will, however, communicate a violet tint to it, and the reaction is quite delicate. The decolorizing action of certain urines on Fehling's solution is due very probably to the presence of glycosuric acid.

Modification of Temperature by Muscular Contractions.—Laborde states that muscular contractions are always attended with augmentation of temperature. In the tetanus of strychnine

poisoning this augmentation is very marked. While it is known that the muscle under contraction is the center of this increment, the nature of the latter is an unsolved problem. Apropos of the subject, M. Ricket states to the Société de Biologie that in an experiment which required the submission of a dog to strong electric currents for a certain length of time, it was found that the temperature rose rapidly as the electrization progressed, and that finally the animal succumbed to it. The source of heat was the violent contraction and extension of the muscles through which the current passed.

Modification of Anthrax.—Some experiments made by Dr. Theodore Cash, and reported in the *Journal of Physiology*, on the modification of anthrax by injections of antiseptics, and especially of bichloride of mercury, are very suggestive as to the therapeutics of this dangerous disease. In the course of these experiments a rabbit weighing about three and one-half pounds was injected (hypodermically) with a total of fifteen milligrams (0.22 grs.) of bichloride of mercury. The injections were given in a highly diluted form and continued through seven days, the total being as above stated. This rabbit was then inoculated with unmitigated anthrax virus, a control animal being inoculated with the same quality and quantity of virus at the same time. The former or prepared animal suffered only a slight passing disorder from which it soon recovered, while the control animal died of anthrax in 40 hours. In four and six weeks respectively, the experiment was repeated and with the same results. The control animal died within forty-eight hours each time, while the prepared animal suffered scarcely any inconvenience. It has also been demonstrated by Prof. Laws that temperature modifies the virulence of anthrax virus—that cultivated at a high temperature being relatively much less virulent than the cultivations of a lower temperature.

Idiosyncratic Intolerance of Tannic Acid.—Dr. J. H. Williamson relates, in the *Practitioner*, for July, the history of the case of a lady who was rendered unconscious and otherwise alarmingly affected by the injection (by the rectum) of small doses of tannic acid, administered during the treatment of bleeding piles. On one occasion thirty grains of the acid had been given in enema and the patient had scarcely had time to step to the bed before the symptoms came on. Respiration was exceedingly difficult, the

finger tips became purple, and erythematous patches appeared on the face. The mental confusion was so great that although the seizure lasted four hours, the patient had scarcely any recollection of the details of it. This happened a second time upon an attempt to use the remedy and a third instance was even more strikingly illustrative of her intolerance of the drug. A chip box that had contained powdered tannin was handed to the patient, who was as well in health as usual. The tannin had been emptied out of the box directly before, and the box had been wiped out; but to make sure it was quite clean, she blew forcibly into the box, expiring and inspiring. There followed immediately afterwards an attack precisely similar to those already described, although it was scarcely so severe. It lasted four hours. Every one who has ever used tannic acid as a topical application for hæmorrhoids has noticed that there is a very great difference in its effects as regards pain. Some will use it freely and complain of no pain whatever, while others will declare the hurting and burning to be outrageous and almost intolerable. This is, however, the first time that we remember of finding it reported as producing alarming general symptoms.

Bright's Disease without Albuminuria.—At a recent meeting of the Société Médicale des Hopitaux, M. Dieulafoy reported four cases of Bright's disease, in each of which all of the pathological phenomena were well marked, yet in which for weeks and even months at a time, there was no trace of albumen to be found in the urine. Per contra, at the same meeting M. Robin related the case of a friend, himself a physician of Copenhagen, now seventy years old and in robust health, who for the past twenty years has eliminated through the urine from eight to thirty grains of albumen daily. These reports show that the presence of albumen in urine, even when continued for years, does not necessarily imply any grave kidney disease; nor does its absence (other pathological phenomena being present) indicate the non-existence of such disease. These facts were known before, but M. Dieulafoy endeavored to show further that with the absence of albumen in these cases, there was an absence also of certain toxic principles that should have been present in the urine. He stated that he had determined by the methods of M. Bouchard that when perfectly fresh, normal, human urine, filtered and neutralized, is injected into the veins of a rabbit to the amount of six

fluid drams to each pound weight of the animal, death ensues: but when this albumen-less urine from patients afflicted with Bright's disease was used in the same manner, the amount necessary to produce death was from three to five and one-half times greater than that of normal urine. In failing to eliminate albumen the diseased kidney also failed to eliminate the ptomaines of normal waste,—a fact which is very significant and suggestive. M. Dieulafoy thinks that this phenomenon may be utilized in the diagnosis of kidney troubles where albumen is absent but other features point to Bright's disease.

Necroptic Entomology.—In a discussion of medico-legal subjects at a recent meeting of the Académie de Médecine, M. Laboulbène said that entomology ought to render great service in tracing the probable length of time that a body had been dead. The *insectes necrophiles*, or carrion insects of the earlier decomposition leave their prey in a regular order of succession. There comes a time, however, when the dry horny portions alone are left, and even these are attacked by the attagenes, anthrenes and ptionioses, etc. in a certain definite order.

Reflex Epilepsy Caused by Larvæ of Insects.—A tanner, 40 years old, was taken suddenly ill on June 14th, with anorexia, griping and mental oppression, and toward evening had a veritable epileptic seizure. A saline purgative administered to the patient caused the passage of several thousand larvæ, which Leuckart recognized as being those of the *musca vomitoria* and *anthomya canicularis*. Upon this discharge the attack was cut short. The case is an interesting one, says the *Deutsche Medicinische Wochenschrift*, from a double point of view, since it not only places beyond a doubt the possibility of symptomatic epilepsy due to entozoa, which was hitherto disputed, but it also demonstrates the danger of the ingestion of cold meats left where they can be reached by the flies in question. The ova are deposited on the meat and, unlike the latter, are not affected by the destructive action of the gastric juices.

Mental Disturbances Consecutive to Cataract Operations.—Landsberg has recently reported three cases of grave cerebral disturbances following cataract operations. These disturbances consisted of hallucinations, followed by violent delirium

As long ago as 1869, Sichel called attention (in the *Union Médicale*) to this phenomenon, which has since then been observed by many others. Schnabel had 12 such cases in a total of 186 cataract operations. Senility seems to be the predisposing cause, as out of the whole number in which cerebral symptoms appeared not one thus far has been less than 66 years old,—the ages running from that up to 80 years.

OBSTETRICS AND GYNÆCOLOGY.

Biniodide of Mercury as an antiseptic in obstetrics, was the title of a paper read by Dr. E. P. Bernardy, before the Obstetrical Society of Philadelphia, at its April meeting. After making reference to a communication on the same subject made during the previous year, the author stated that all that he had then said concerning the exceeding value of the biniodide had been more than substantiated, and that the experiences of the past twelve months had convinced him that it was far superior to any other antiseptic of which he had any knowledge. As the pure drug is very sparingly soluble in water it has been found convenient to prepare the biniodide in a shape that readily dissolves in that fluid, viz: in little pellets in which the mercuric iodide is placed in conjunction with potassium iodide. Both drugs should be perfectly dry and in a state of fine powder. The pellets are made in three grades as follows: (1), 1:4000; mercuric iodide, 3.82 grs.; potassium iodide, 2 grs. (2), 1:8000; mercuric iodide, 1.92 grs.; potassium iodide, 0.75 grs. (3), 1:15000; mercuric iodide, 1.0024 grs.; potassium iodide 0.50 grs. Each of these is sufficient for one pellet, which when required for use is dropped into a quart of water at 110°F. It dissolves quickly and does not stain the clothing. Dr. Bernardy generally uses the first formula (1:4000) and when a weaker solution is required cuts a pellet into halves, thirds or quarters as the case may be.

The Abuse of Intrauterine Medication.—At a recent meeting of the Alumni Association of the Women's Hospital of New York, (reported in the *Am. Jour. of Obstet., etc.*) Dr. B. M. Emmet, read a paper with this title, in which he took the grounds that while the source of the various discharges from the

uterus lies in the mucous membrane of that organ, the real cause is pelvic congestion, and therefore that intra-uterine medication was not only not indicated but might be the cause of serious damage to the patient. A slight prolapse of the uterus, whether due to cellulitis or not, would cause pelvic congestion, and this, in turn, discharge from the uterus. The same reasoning held with versions and flexions of the uterus. Anæmia, chlorosis, polypi, fibroids, etc., were also causes of discharge, and must be carefully differentiated before we resort to intrauterine medication. A concealed cause, overlooked by all but the careful observer, is laceration of the cervix extending up the canal of the internal os, and healed only externally. Here again intrauterine applications are indicated not for cure, but repair of the laceration. In all these conditions, intrauterine applications, being misdirected, not only fail to do good, but are harmful. The average time of cure is shorter when these applications are not resorted to, for thus relapses, due to our own misjudgment, are avoided. Endometritis is by no means the common ailment that daily talk would lead one to expect.

How shall the Obstetrician Disinfect His Hand is the question discussed by Dr. H. Kummel, in the *Centralblatt fuer Chirurgie*, and he comes to the conclusion that all practical purposes are subserved by a thorough scrubbing with warm water and soap, applied with a good stiff brush for at least 3 minutes, after which they may be rinsed with a one-per cent sublimate solution or a solution of thymol or carbolic acid. Where the hands have been in very infectious matter the scrubbing may last 5 minutes and be followed by a soaking of three minutes in either of these solutions.

[August

Department of Microscopy.

CONDUCTED BY

FRANK L. JAMES, Ph. D., M. D., President of the St. Louis Society
of Microscopists, of St. Louis.

AMERICAN SOCIETY OF MICROSCOPISTS.

As previously announced, the ninth annual meeting of this society will convene at Chautauqua, on the 10th inst. and will remain in session five days. From the circular issued by Dr. Kellicott, the secretary of the society, we glean the following matters which will be of interest to those intending being present.

RAILWAY FARES. On most of the roads in the United States, having connection with those leading to Chautauqua there are regular summer excursion rates. The fare from St. Louis, by the Chicago and Alton, is placed at \$26.25 for the round trip.

BOARD. The Secretary of Chautauqua, gives assurance that there will be plenty of room and boarding places—either at the hotel or the cottages. The rates will be \$2.00 *per diem* at the hotel, and \$1.00 in the cottages.

ADMISSION TO THE GROUNDS. A pass to and from the grounds for the days of the meeting will be issued to members on the presentation of a certificate of membership duly numbered and signed by the Secretary (inclosed with this circular). Those not receiving this certificate before August 1st, should notify me. Those nominated and elected at the meeting will secure passes after election. Passes will also be granted to a wife or a daughter who accompanies a member.

THE PROGRAMME.

Tuesday, August 10th, 10:30 A. M., opening session, addresses of welcome, election of members and business; at 2 P. M., first session for reading and discussing original communications; in the evening the annual address of the President.

Wednesday, August 11th, morning session 9:30 to 12.00 and afternoon session, 2:00 to 4:30, devoted to papers; at 5.00 P. M. one or more parties will go upon the lake for practice in the use of the dredge and trawl as a part of working session; in the evening the first working session.

Thursday, August 13th, forenoon session, 9:30 to 12.00, papers; afternoon working session from 2.00 to 5.00 (special programme); in the evening the annual exhibition of objects, etc., by microscopes and projecting lanterns.

Friday, August 13th, morning session 9:30, election of officers, reports of officers and standing committees, papers; afternoon, papers and reports; evening session, conversazione.

In case important papers remain for discussion, a final session may be held Saturday morning.

Headquarters will be at the Hotel Athenæum; the general session will be held in the Hall of Philosophy, which is well situated for the purpose; the working session in the Children's Temple; the exhibition of objects to invited guests in the parlor and special rooms of the Hotel Athenæum; and the President's address will be delivered in the Amphitheater or Children's Temple, as the Society shall choose.

The Nerve-fibres of the Gall Bladder of a guinea-pig may be beautifully differentiated by the following process. Fill the bladder with lemon juice and let remain for five minutes, or until the acid has penetrated the tissues. Then place the emptied bladder, or pieces of it, in a 1 per cent solution of osmic acid and let remain for 10 or 15 minutes. Remove and wash well with running water. In cutting make the sections lengthwise. Stain with picro-carmin. Before mounting tease up the epithelium a little, and mount in formated glycerin.

For Killing Minute Organisms without distortion, a writer in the *Scientific Enquirer*, recommends a solution of muriate of cocaine. He advises the following method, which I have tried and found to work well: the organisms are put in a watch glass in distilled water and a half *per cent* solution of cocaine added drop by drop, until the amount added is equal to one-fourth of the entire fluid. In ten minutes time the organisms are found to be dead, but so far as microscopical appearances go, absolutely unaltered,—not distorted in the least.

The Blood Plaque.—This name is proposed by Bizzozero for that minute cellular element of the blood hitherto known as 'granular debris,' 'globulines,' 'third elementary corpuscle,' etc. The

designation is a happy one and seems to 'take' very well, judging from the amount of matter one sees in the journals about it. Many of the medical journals are speaking of it as though it was some new discovery, and not a new name given to an old one. The tendency of this element to change upon leaving the vessel and reaching the air has hitherto prevented its being generally studied. This tendency may be corrected to a certain extent by treatment with osmic acid. The solution (1 per cent) should be smeared over the skin at the point where it is desired to draw blood. The acid acts as a fixer and the element remains unchanged for a considerable time after leaving the vessel.

THE JOURNALS FOR JULY.

The Microscope.—The opening paper is one by Dr. A. G. Field, of Des Moines, Ia., entitled the "Microscope in Medicine." So far as it conveys any intimation of the nature or contents of the article, the title is a misnomer. After a platitude or two about the value of the *Microscope in Medicine*, the author rashly proceeds to criticize and demolish the methods of investigation of and results achieved by Pasteur and Koch. The boldness with which this writer or talker puts his "I venture to predict" and "I venture to say" against the patient labors of a lifetime, aided by all the appliances that money and power can bring to the aid of the savants whom he attacks, can be born only of intense ignorance or equally intense egotism . . . Dr. Stowell continues his studies in Histology, the current article being on the methods of examining mucous tissue. The balance of the journal is composed of notes and selected matter.

The Scientific Enquirer.—The July number opens with a paper by G. L. Goodale, on "The Study of a few Common Plants." The article is one of a series already published in this country by the Boston Society of Natural History. Its republication under the circumstances is a compliment to Prof. Goodale. The notes on general scientific matters are interesting and well selected, while the answers to queries contain a lot of valuable information.

The Journal of Microscopy.—This welcome quarterly was never brighter than in the present number. The opening paper is devoted to that gem of British wild flowers—The Gold Eyed Pimpernel (*anagalis arvensis*) or shepherd's weather glass. The writer of the article, P. H. Moore, evidently not only loves the flowers, but he knows how to draw and describe them. The plates illustrating the paper are beautiful . . . Prof. Worsley Benison, F. L. S., lecturer on botany at Westminster Hospital, contributes a most entertaining and instructive article on Movement in Plants. . . . Mr. V. A. Latham, F. M. S., continues his series on "The Microscope and How to use it," the present being the 7th paper, and is devoted to the subject of hardening agents . . . There are a number of pages of interesting notes from the memorandum books of the members of the Postal Microscopical Society, which, with book reviews and notices, close the number.

Journal de Micrographie.—Our good friend, Dr. Pelletan, commences his *Revue Mensuelle*, and ends it, as he has commenced and ended a good many others—skinning Professor Pasteur. The opening attack is a dissertation on the doctrine of microzymes as opposed to the microbial theory. The apostles of the former are M. M. Béchamp and Estor and, of course M. Pasteur is put in the position of high priest to the "religion of the microbes." While I look upon Dr. Pelletan as a man entirely capable of criticising M. Pasteur, I cannot help but think that he is doing his own reputation, as a scientist and as a man, a great injury by the virulence and persistency of his attacks on the latter. They are calculated to rebound against the author, and if Dr. Pelletan is wise he will see this fact. M. Pasteur may be mistaken; he may not have found the microbe of rabies; but whether he has or not, his past services entitle him to respect, and the earnestness and unselfishness with which he has labored should be a guarantee of his personal honesty. A great deal is said in the European and especially the French press about the personalism of our American journals; but nothing that has appeared in our recent political campaign literature, vile and mendacious as most of it is, is half so truculent and abusive as are these attacks of Dr. Pelletan upon M. Pasteur. . . . Prof. Ranvier, of the College de France, continues his remarkable series of lessons on the mucous membranes and the glandular system. The present article is on the nerves of the biliary

vesicule. A most valuable and timely article is one by Dr. Léon Marchand on Microbes. Especially valuable are the two diagrammatic pages illustrative of schizomycetes and schizophycetes. We will reproduce the entire article at no distant day. Students of comparative ophthalmology will find in the articles of Professor G. V. Ciaccio, (of the University of Bologna) a most valuable article on the Fine Structure of the Eyes of Diptera A study by Paul Combes, entitled The Truth about Rabies, is also well worth reading. It closes the number, which is an especially interesting one.

ELEMENTARY MICROSCOPICAL TECHNOLOGY.

X. THE CELL WALL.

§. LVII. As hitherto intimated the choice of a cement for building the supporting wall of, and closing the completed cell, depends very much upon the nature of the mounting medium to be used. To be permanent it is manifest that the container must be absolutely insoluble in the fluid which it is to hold and with which it remains in contact. Hence, for technical purposes, we may divide mounting media into two great classes, viz: the aqueous and the gummy or resinous. In the first we place glycerin, glycerin jelly, camphor water, camphorated gelatin, carbolyzed gelatin, serum, etc., soluble in water. The second comprises Canada balsam, damar, the oils, etc., insoluble in water, but soluble in benzol, chloroform, oil of turpentine, ether, alcohol, etc.,—fluids which are used in preparing most of the cements used in microscopy. At first sight it would seem that no great difficulty should arise on this score and that the trouble would be obviated by using aqueous cements for gummy or resinous media, and *vice versa*. But in practice we find that the aqueous cements are attacked by the moisture of the atmosphere, by the water used in cleansing slides (which will occasionally get soiled) and finally, by the fluids used with immersion lenses. This difficulty is overcome

by covering the aqueous cements, after they have set and dried thoroughly, by a resinous cement, impervious to and unaffected by the atmosphere. An analogous operation enables us to protect a resinous cell wall from being attacked by similar mounting media. In such cases all that is necessary is to cover the wall with an aqueous cement which, when dry, acts as a complete protection to it. This enables us to use one and the same cement for the foundation of all cells, whether as containers for balsam or glycerin, damar or gelatin, leaving subsequent manipulations to be determined by the mounting medium to be employed. The importance of this apparently trivial point is that it enables the microscopist to keep on hand at all times a stock of thoroughly seasoned cells, ready to be filled when wanted—a point which will be recurred to later on.

§. LVIII. THE TURN TABLE.—Of all the instruments which of late years have been introduced as aids in microscopical technology, not one has conduced so much to economy of time, permanence of mount and elegance of finish as has the turn-table. In its simplest form this is a disc of heavy wood or metal, three and a half or four inches in diameter, mounted so as to rotate easily upon a perpendicular pivot or axis, and provided with clips to hold the slide in place. A little table, somewhat larger than the disc, acts as a hand-rest in operating. Fig. 1, represents such a turn-table.

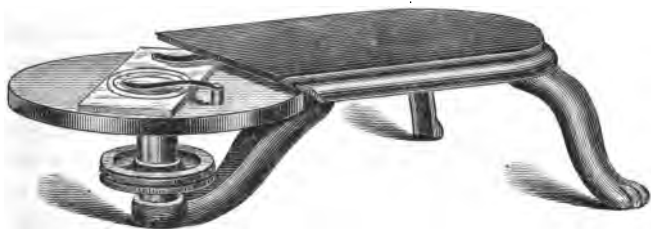


FIG. 1. TURN-TABLE.

Upon this simple instrument there have been constructed quite a number of improved turn-tables—the improvements consisting in devices for the automatic centering of the slip, improved methods of holding the same, devices for decentering, etc. Nearly every manufacturer of microscopical accessories has some such improved turn-table, and many of them are very meritorious. Among the best of the self-centering devices I may refer to those of Griffith, Bausch & Lomb, Bullock, Walmsley, and Queen.

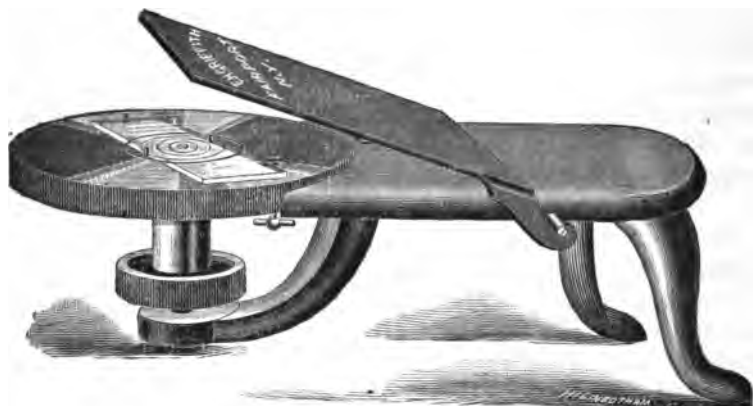


FIG. 2. GRIFFITH'S TURN-TABLE.

Fig. 2 represents the self-centering and improved turn-table of Mr. E. H. Griffith, of Fairport, N. Y., manufactured for him by the Bausch & Lomb Optical Company, Rochester N. Y.

§. LIX. METHODS OF USING.—Having placed the slip, thoroughly cleaned and dried, upon the turn-table, and centered it by the eye (if the instrument is not automatic), the disc is given a rapid rotary motion by laying the forefinger of the left hand upon the milled edge of the disc itself or the button underneath it, and drawing it quickly toward the person. In the meantime, the right hand, holding a camel's hair pencil which has been dipped in cement, is rested upon the "table" and the point of the pencil is brought into light contact with the surface of the rotating slip. The brush should be held exactly as a pen in writing, and care must be taken that the contact of the point shall be tangential to the diameter of the circle that it is desired to make, and at right angles to an imaginary line drawn from the body of the operator through the center of the rotating disc. This is in order that the friction of contact shall draw the hairs composing the pencil in a straight line, away from the hand and parallel with the handle of the brush. If held otherwise the point will be twisted and the circle made smaller or larger than is desired. A very little practice will give the 'nack' and will teach the student just how much cement to take up with the pencil.

§. LX. The cell wall, as usually built, should have a width of about one-sixth of an inch, and the outer diameter should project

about half that space beyond the edge of the cover-glass, all around. The depth of the cell depends upon the thickness of the object that it is desired to mount in it. For ordinary sections of pathological or histological material, the depth should not be over one five-hundredth part of an inch—which is obtained by putting on from two to three layers of oxide of zinc cement. When more layers are required the first two or three should be allowed to dry quite thoroughly before adding others. When the cells are to be very deep other devices and precautions will be necessary, and will be described under a special heading.

§. LXI. Many microscopists are in the habit of making their cells as they need them, allowing the rings to dry only so much that the cover-glass will not stick fast when it is applied. Some do this from ignorance and thoughtlessness, while others, who have never experimented upon the relative durability of a cell made all-at-once and one constructed upon a thoroughly dried and seasoned wall, claim actual advantages for the former procedure. They say when the cover-glass is applied to the walls while they are yet plastic, a more accurate coöptation of surface is obtained, and a more homogeneous mass is made with the cement that is afterwards applied in closing the cell. These advantages, if they be such, are more than counterbalanced, in all except dry mounts, by a radical defect inherent in all such hastily prepared mounts, whether made of zinc white cement, Brunswick black, or any other material with which we are acquainted, viz: *due allowance cannot be made for the shrinkage of the cell in drying*. This is the secret of most of the failures and disappointments which produce the bitter complaints that we find in the technical journals, from correspondents denouncing this or that cement or mounting material.

All the cements described in the foregoing chapter, with the exception of gold size, consist of a solid material or materials, suspended or held in solution in some more or less volatile medium the evaporation of which again leaves a solid mass. The exception (gold size), hardens partly, though very slightly, by evaporation, its solidification depending principally upon a chemical change wrought by the oxygen of the atmosphere. But even this change is accompanied by a diminution of volume, and as to the cements composed partly of volatile material it is plain that there must be a very large decrease of volume in the process of solidification. In asphalt, zinc-white and shellac cements and marine glue

among the resinous cements, and arabicin and gelatin cements among the aqueous, this shrinkage amounts to a diminution of volume of at least 30 per cent. When a cell is properly finished it must be entirely filled with the mounting medium. If it is not so filled we are bound to have air bubbles,—which are not only unsightly but which ultimately destroy the mount. It is plain that if we entirely fill a cell with any mounting medium and this cell afterwards loses one-fourth or one-third of its volume, something must give way. The fluid (air excepted) is practically incompressible, yet great pressure is brought upon it. It has no space within the cell into which it can retreat, and consequently it must force its way out of it. The pressure is slow, and gradual, but continuous, and finally the cell gives way at its weakest point; the medium exudes or 'creeps out' and is discovered. It is washed off and more cement applied. In a few months the process is repeated—the fluid gradually infiltrating and disintegrating the cement, until finally the slide is a total wreck. The builder of it meanwhile, not suspecting that he has undertaken the old, old problem of opposing an unyielding body to an irresistible force, damns the cements or the mounting medium, or both, and forthwith indites a communication to some technical journal, the editor of which 'sympathizes' with him, and the twain unite in solemnly warning the profession not to use the offending materials "unless they are prepared to have a certain percentage of their mounts destroyed." This is another example of the workman blaming his tools for his own lack of skill. If a 'certain percentage,' only, of mounts made with a cement or mounting medium are ruined by any means whatever, it is proof positive that a certain percentage remains which is not thus affected. And since the operations of nature are carried on by fixed laws, and not by caprice of inanimate matter, it is self-evident that those which were destroyed lacked the skill and care that was expended on the balance. All of which induces us to formulate and propound the following:

AXIOM.—Never finish a cell the walls of which are not thoroughly dry and seasoned.

§. LXII. ANOTHER PRECAUTION which I would impress upon the beginner is the absolute necessity of having his glass slips clean and, above all, free from moisture, especially when balsamic, oleaginous or resinous cements or mounting media are to be employed. It is really wonderful how small an amount of moisture

will destroy the tenacity of the one and the transparency of the other. And the same precaution against moisture should be observed in making the solutions of damar and other resins and gums, in preparing the cements. The few drops of water adherent to the sides of a bottle will render milky and opaque a pint of the solution of damar in benzol.

§. LXIII. CELLS FOR DRY MOUNTS, or mounts in which atmospheric air is the medium, and which are almost always intended for direct examination, are usually required to be much deeper than those for examination with transmitted light. Instead of resorting to the slow process of building them with cement, layer by layer, they may be quickly prepared by cementing to the slide rings made of glass, metal, vulcanite, ivory, mother of pearl, in fact of almost any solid material of a proper size and shape. Brass curtain rings, a pearl button with the center scooped out, the eyelet of a copper rivet, all make excellent cell building material. They may be attached to the glass by any of the cements given above, but I prefer marine glue for the purpose. Beautiful cells for this class of mounts may be made of sheet wax, as suggested by the Rev. Dr. J. T. Brownell at the Rochester meeting of the American Society of Microscopists (1884). The wax used for the purpose is that made for flower-workers. Several layers may be superimposed, and the whole can then be turned into shape by placing the slip upon the turn-table and applying the edge of a sharp knife or chisel to it as it revolves.

At the Chicago meeting of the Society (in 1883) Prof. A. H. Chester exhibited some very handsome cells made by punching annular discs from thick tinfoil and cementing them to the slip with marine glue.

A very beautiful cell is made of shellac in the manner described by Mr. Rebaz before the same Society at the Rochester meeting. The details of these three processes are too long to be described here, but may be found in full in the reports of the Proceedings of the A. S. M. for 1883 and 1884.

Finally, a most excellent cell may be made from a paste of litharge and glycerin. The paste is applied to the center of the slide and as it commences to set the slip is placed upon the turn-table and the mass turned down to a proper size and shape. A skillful use of the turn-table, after the fashion of a lathe, enables one to make cells of almost any plastic material.

[August,

Department of Dermatology and Syphilology.

CONDUCTED BY

A. H. OHMANN-DUMESNIL, A. M., M. D., of St. Louis.

Arsenic in Skin Diseases.—A great deal of attention has been drawn to the value of arsenic in skin diseases of late and to ascertain to what extent the drug is used in this connection by American physicians, and also the results of their experience as to its therapeutical value, the Editor of the *Journal of Cutaneous and Venereal Diseases* is desirous of obtaining information upon the following points:

Are you in the habit of employing arsenic, *generally*, in the treatment of skin diseases?

In what diseases of the skin have you found arsenic of superior value to other remedies?

What ill effects, if any, have you observed from its use?

What preparation of the drug do you prefer, and in what doses do you employ it?

Address, Editor of *Journal of Cutaneous and Venereal Diseases*
66 W. 40th Street, New York.

I would urgently request all the readers of the JOURNAL to answer these questions.

Elephantiasis Arabum of the Labia Majora.—Dr. Henry J. Raymond details an interesting case of this disease in the July number of the *American Journal of the Medical Sciences*. The patient, a full-blooded Indian woman, of twenty-eight, has lived all her life on the banks of the Klamath, in California. A venereal taint, although probable, is denied. A tumor of her genital lips, about the size of a large walnut existed from birth. This tumor increased in size after she became pregnant and increased until, at term, it had attained nearly its present dimensions.

When first seen the patient had a pendulous mass of solid but elastic consistency hanging from the pudendum, suspended by a strong pedicle of horse-shoe shape. The skin of the pedicle was slightly thickened, but not nodular; it was not adherent to the under-



FIG. 3. FRONT VIEW OF TUMOR.

lying tissues, nor abnormal in color, the pubic growth of hair being situated on the body of the tumor. The skin of the tumor was thickened, rugose, nodular in places and throughout adherent to the subjacent tissues. Pigmentation was marked; sensitiveness not increased. A sulcus about three inches in depth extended along its posterior aspect (Fig. 4) from the anterior commissure of the vulva downward. The urine in running down the sulcus caused

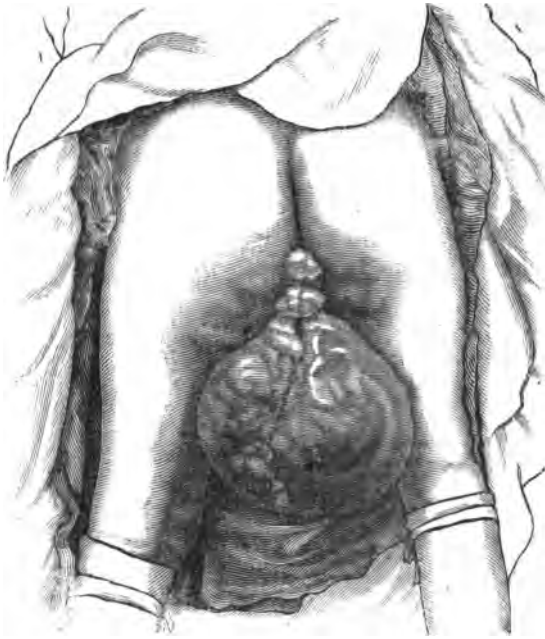


FIG. 4. BACK VIEW OF TUMOR.

burning and irritation. The largest circumference of the growth was the horizontal, this being thirty inches, the antero-posterior twenty-four inches, the latero-lateral twenty-two inches and the shortest circumference of the pedicle, eighteen inches. An operation for its removal was made, the tumor being removed by a few strokes of the knife. The hæmorrhage was trifling and was subdued without the use of ligatures. In about two weeks healing was accomplished with the exception of a small patch which was left to cicatrize. The most interesting feature in connection with the case is the fact that pregnancy seems to have communicated an impetus to the growth of the tumor.

Etiology and Pathogenesis of Lupus Vulgaris.—Dr. Felix Block contributes an interesting and valuable article upon this subject to the *Vierteljahresschrift fuer Dermatologie und Syphilis*, in which he fully considers the question. As the result of his researches and clinical observations, he concludes that lupus is a chronic tuberculous disease of the skin and of certain mucous membranes. It exists as a genuine tuberculous affection both in

individuals affected, before the advent of the disease, with hereditary or acquired tuberculosis and in those otherwise healthy. In such cases it is often complicated by other tuberculous affections, often peripheral (scrofulides), seldom visceral. It is unnecessary to differentiate between a scrofulous lupus (with complications) and an idiopathic lupus (without complications) as Pontoppidan insists upon, as the author holds to the opinion that pathogenetically both forms of lupus are forms of tuberculosis. This contribution is an interesting one as are all bearing upon the pathogenesis of lupus vulgaris. The tuberculous nature of this disease has been a moot point for a long time and all discussions upon the subject tend to throw more light upon a very obscure question.

Arsenical Eruptions.—Drug Eruptions is the title of a work which will soon be published, the author being Dr. Prince A. Morrow, who publishes the article on Arsenical Eruptions, from advance sheets, in the *Journal of Cutaneous and Venereal Diseases*. As he pertinently remarks, whilst the local application of arsenical preparations produces only dermatitis, the absorption of a certain amount of the drug or its ingestion will produce eruptions. All the various methods which constitute the means by which arsenic finds its way into the organism, cannot be enumerated here. The various forms of eruption are the erythematous, the papular, the urticarial, the vesicular, the pustular and ulcerative and brownish pigmentation. The variety of lesions in this as well as in the case of other drug eruptions should make practitioners careful to inquire as to the possibility of drugs producing the eruptions to which their attention may be called. Therapeutically arsenic is a neuro-tonic and is supposed to modify cell nutrition and it may cause disorders of the capillary circulation and disturbances of the nutrition of the skin, which would account for the various eruptions which it produces. The treatment consists simply in withdrawing the exciting cause—the arsenic.

Statistics of Lupus.—Dr. Eugene Sachs has made statistical tables of the cases of lupus seen at the Heidelberg Clinic and publishes the results in the *Vierteljahresschrift fuer Dermatologie und Syphilis*. Of 161 patients 61 were males and 100 females. Of 137 patients 108 had the face or head first affected; 55 had the nose first implicated; in 28 the disease first made its appearance on the cheeks. Age was noted in 121 cases and in these the dis-

case first manifested itself in 63 between the ages of ten and twenty. In 105 patients, before the disease made its appearance, 36 were tuberculous; during the course of the disease, tuberculosis was noted in 66. In 11 cases there was lupus in the family. Various forms of treatment were given, the following being the results in 99 cases: 44 were cured; 11 relapsed and are still under treatment; 44 relapsed and did not return for treatment.

Syphilis of the Nose, Mouth and Pharynx.—What are understood as the tertiary lesions of syphilis in the nose, mouth and pharynx are considered as sequelæ by Dr. D. H. Goodwillie in the *New York Medical Journal*. In reference to their local treatment he says, that superficial ulcers of the mucous membranes should be treated by mild caustics; the deeper ulcers that involve the muscular tissues, by the solid stick of nitrate of silver or the galvano-cautery, which latter he prefers. I have used nitric acid in both the superficial and deep forms with good success, but agree with the author's injunction that care should be taken not to destroy healthy tissue or granulations, to needlessly uncover bone or cartilage, or to cause deformity of important soft tissue. As soon as dead bone is discovered the surgical rule should be followed. No time should be lost in its removal. It is now a foreign body and an irritant which endangers the neighboring soft tissues, and may lead to destruction and deformity. When extirpated care should be taken to leave the periosteum intact so as to secure as much new bone formation as possible.

The Anomalies of Syphilis.—M. Charles Mauriac in one of his lectures at the Hôpital du Midi says, that when there are anomalies in the evolution of syphilis, there is a much greater tendency to advance than to retard. For instance, the precocious appearance of tertiary is much more common than the indefinite prolongation of the accidents peculiar to the secondary period. Are not the syphilodermata exceedingly rare after the seventh or eighth year? Is there an authenticated case of a mucous patch appearing ten or twelve years after the primary lesion? On the other hand, how often do we not see ulcerative lesions, with a more or less pronounced tertiary type, mingling with the superficial lesions of the secondary period, not to mention the cases in which the invasion of the skin by the tertiary processes is so complete and so absolute that very soon there remains not the vestige of secondary lesions. The syphilitic visceral involvements, which

are regarded as always tertiary, are far from rare in the secondary and virulent phase of the disease. Very frequently the internal organs are more or less attacked. There are even some, such as the nervous centres and particularly the brain, which are so attacked more often and more dangerously in the early stages than later on, and this without a sensible difference of the internal lesions with the epoch in which they are produced.

SHORT TALKS ON DERMATOLOGY.

Under the above Caption the Editor of this Department proposes, in each number of the JOURNAL, to give a short practical synopsis of the principal points attaching to the diagnosis and treatment of some skin disease. No attempt will be made to follow any classification, but diseases will be taken up as they suggest themselves.

X. ACNE.

Acne, or acne vulgaris as it is sometimes called, is one of the most common of the diseases of the skin. It constitutes quite a respectable percentage of the grand total, but relief is not sought as often as its frequency would seem to indicate. It consists essentially in an inflammatory condition of the sebaceous glands and manifests itself in the form of papules, pustules and tubercles distributed for the most part about the face, neck, back and shoulders. The most common forms are the papular and pustular, so named from the predominance of the lesions existing at the time. The forehead is perhaps the portion of the face most frequently attacked, other portions being also implicated, however, quite frequently. There are no subjective symptoms connected with this disease unless it be a slight pain upon pressure when the disease is in its acute form. The trouble, generally, begins as a papule varying in size from a pinhead to a split pea and this may remain as such or become a pustule through the inflammatory action which is present. Should it remain a papule it undergoes more or less resolution or may enlarge and become a little more indurated and infiltrate a portion of the underlying tissues and thus become a tubercle. When a pustule forms it develops to its acme, the pus is discharged, a small crust forms and it heals spontaneously. Successive crops are continually making their appearance so that it may happen that the patient is never entirely free of the disease for years.

Acne occurs in both sexes about equally and, as a rule, first makes its appearance at puberty. At this time the whole cutaneous system undergoes a greater or less disturbance, the hair in various portions of the body begins to grow and the sebaceous glands are prepared for a greater functional activity than they have hitherto possessed.

The causes of acne are varied and numerous. Among those which hold a first place, however, may be mentioned disturbances of the gastro-intestinal tract. Constipation especially is a very fruitful cause of this disease, as also dyspepsia and allied disorders. These are conditions very often found more especially in young women. Besides this we have uterine disorders, such as dysmenorrhœa, amenorrhœa and genito-urinary disturbances. Renal troubles act as exciting causes of acne, at times. There seems also to be a certain tendency to the disease, in certain families, so that it would almost seem as if some hereditability was attached to it. In addition to the internal causes, a few of the principal ones having only been mentioned, we have external agencies producing the so-called *acne artificialis*. Tar and similar agents are the active agents in its production whilst the internal use of certain remedies, notably iodide of potassium, produces an artificial acne generally classified under the medicinal eruptions.

The diagnosis of acne is not very difficult. It must be distinguished from eczema, syphilis and small-pox. From the first mentioned disease it is easily distinguished by the absence of itching and from the fact that eczema of the face is rarely papular or pustular in character. The history, moreover, would serve to distinguish the two very easily. The papular and pustular syphilodermata must be examined a little more closely, especially the acne-form syphiloderm which sometimes occurs upon the forehead as the *corona Veneris*. The history, the presence of other lesions, the tendency of syphilitic lesions to group and the length of time the lesions exist, if carefully considered, will make the diagnosis clear. As to variola, the history would be sufficient. The chronic nature of acne, the comparatively short period of time between successive crops, the locality attacked, the age of the patient, the inflammatory nature of the lesions, the absence of subjective symptoms and the anatomical seat of the disease (the sebaceous glands) should never be forgotten. It is an uncommon thing to see acne in a child before puberty or in a person beyond the forty-fifth year.

The treatment of this disease should be constitutional and local. The general measures employed should be such as will tend to bring the patient to as normal a condition as is possible by therapeutic means. The condition which is most common and most constantly demands attention is the constipation which exists. To overcome this the diet, in the first place should be so regulated as to insure the greatest amount of nutrition with the least amount of labor on the part of the stomach and arranged so as to preclude the condition of constipation or a tendency thereto. To make the bowels more regular, fluid extract of cascara sagrada, or the aperient mineral waters are useful. An occasional dose of calomel will be of benefit. The following aperient mixture given by Duhring gives excellent results:

R Magnesiæ Sulphatis.....℥jss
 Ferri Sulphatis gr. xvj
 Acidi Sulphurici dil.....℥ij
 Aquæ.....℥viiij

M.

Sig. Tablespoonful in a tumbler of water.

This should be taken about twenty minutes before breakfast or, if necessary, before supper also.

Besides the general remedies indicated in the case we have some which do good occasionally. Sulphide of calcium, in quarter grain doses four times a day, is sometimes indicated in the suppurative form. Arsenic is useful in the indurated forms or where the papules are imperfectly developed and may be given in two or three drop doses of Fowler's solution in wine of iron or in one drop doses of a one per cent. alcoholic solution of bromide of arsenic thrice daily after meals.

The local treatment is to be either soothing or stimulating according to the indications which are present. In the greater number of cases the latter plan must be adopted. Soothing applications and lotions and bland ointments should be employed where there is a high grade of inflammation. The methods of stimulating are numerous. Sapo viridis pure or diluted may be applied at night, following this with a bland ointment. The pustules should be opened and their contents squeezed out. Hot water cloths applied at night and followed in the morning with cold douches and frictions are valuable. Sulphur is a very good remedy to apply and may be prescribed in ointments or lotions in strength varying from twenty grains to two drachms to the ounce.

The following lotion recommended by Bulkley is good:

R	Sulphuris Loti.....	3j
	Ætheris.....	3vj
	Alcoholis.....	3iijss
M.		

Sig. Apply as a lotion.

Sulphuret of potassium may be used as also Vleminckx's lotion. Where more active stimulation is required biniodide of mercury or corrosive sublimate or protoiodide of mercury or ammoniated mercury can be used.

The surgical treatment is often of greater value more especially in the indurated and tubercular forms and care should be taken to cut well into these lesions passing through the center and applying warm cloths so as to induce free hemorrhage. In conjunction with this the sulphur and mercury ointment mentioned in the "Talk" on Comedo will prove serviceable.

One point which should not be forgotten is to examine male patients for urethral stricture. If such exists bingies should be introduced or other means employed to enlarge the calibre of the urethra at the part of constriction. In a number of cases the beneficial effects of this treatment will be observed in an amelioration of the skin trouble.

The prognosis of acne depends, in a great degree, upon the cause producing it. It has a tendency to be chronic and is generally stubborn to all treatment to a greater or less degree. There is a tendency to spontaneous recovery at about the twenty-sixth year, but if the cause of the disease be corrected and appropriate local treatment instituted success will be pretty fair.

First loathe, then pity, then embrace.—Those 'Americanism' which formerly furnished our English and French conferees the materials for many a fling at our journals seem, some of them at least, to have lost their horrid aspect on a nearer acquaintance with their uses. The American plan of interleaving advertisements with reading matter ('insets' as they are technically called) which was formerly a never-failing source of ill-natured gibes, has been adopted by some of the leading English, French, German and Italian Medical Journals. The *Progres Medical* now comes to us with an 'inset', and the *Medical Record* has been using them for several months.

Department of Diseases of the Eye and Ear.

CONDUCTED BY

A. D. WILLIAMS, M. D., of St. Louis.

Why we have two Eyes and two Ears.—To give the body an evenly balanced and symmetrical appearance is not the only reason why it is provided with an eye and an ear on each side. It is true that the body is composed of two apparently exactly similar halves, but the internal organism does not carry out the idea suggested by external appearances. The symmetry of the structure is indeed enhanced by the disposition of these organs in the manner that we find them, but there are creatures, which, like the flounder, sole, or flat-fish, have both eyes on one and the same side of the head. The true reason for the duplication of the organs of vision and hearing lies in the physical nature of light and air and of things around us, and thus two eyes and two ears become a necessity for the comfort and convenience of living beings. Two eyes are necessary for us to be able to judge of the distance of objects and two ears to comprehend the direction from which sound comes. Anyone that has suddenly lost the sight of one eye or the hearing of an ear, can fully appreciate this fact. When such a person desires to take hold of or pick up a small object, a pin, for instance, he will most frequently over-reach it, or fall short of it, and he will wonder why this should be the case. The explanation is very simple, and is based upon the same principle that enables a surveyor to run off a base line and by measuring the angles made by vision to a distant, perhaps inaccessible point, tell the exact distance to that point. In ordinary vision the base line is the distance between the eyes. The eyes being directed towards a point, vision proceeds in a direct line from each, the lines crossing each other at the point looked at,—thus making a triangulation, as it were, the base line of which is the distance between the centres of vision in each eye. This calculation of distances is to a certain extent a reflex mental action; but to a certain extent only, since it is a faculty which can be cultivated to a very high degree.

The reason why two ears are necessary is much more obvious to the casual observer of natural phenomena. Sound travels by

waves radiating from a central point of disturbance, like the wavelets caused by dropping a pebble into still water. So far as the hearing of each individual is concerned these waves move in a direct line from the cause of sound to his ear, the impact being greatest in the ear that is nearest to the source.

The effect, in this respect, of the total loss of hearing in one ear was forcibly illustrated by the statement of a patient who consulted me recently. He lived in a wild portion of Tennessee and spent a good deal of his spare time in the woods hunting squirrels, accompanied only by his dog. An explosion suddenly destroyed the hearing in one ear. After this accident, while in the woods, he found that he could hear his dog bark, but for the life of him could not locate the direction of the sound, even when quite close to him, and he was compelled to take his little boy along with him to find the dog. After a time persons learn to correct to a limited extent, the errors in estimating distances, after the loss of vision, but the effect of the loss of an ear upon the estimation of the direction of sound is never corrected.

A Piece of Sponge Lost in the Nose.—A gentleman from the country came in the other day and stated, that on account of some soreness in the end of the nose he had saturated a piece of sponge with some kind of medicine and pushed it into the nose and had lost it. On examination, I found the sponge in the upper back part of left nostril and had no trouble in pushing it into the pharynx. The sponge had been in there over two weeks and was sadly in need of iodoform or some other powerful disinfectant. Had it remained there it evidently would have grown fast to the mucous membrane; or rather, the mucous membrane would have grown into the meshes of the sponge. This would have been a case of sponge-grafting.

Glaucoma Treated without Operation.—At the séance of June 15th, of the Académie de Médecine, M. Panas stated, that he had found that certain myotics, hitherto employed as palliatives, may under certain circumstances exercise a directly curative action. Both eserine and nitrate of pilocarpine have been found to act in this manner when employed as collyria. The solution of eserine should be 1 part of the drug to 100 of distilled water. That of pilocarpine nitrate should be double that strength (2:100). Eserine, said M. Panas, should always be preferred.

Excessive use of Quinine causes Blindness and Deafness.—In inordinate quantities quinine, in some manner as yet unknown, poisons both the optic and auditory nerves so as to completely destroy their functions, producing absolute blindness and deafness. The number of reported cases where such results have followed the excessive use of quinine, is small, but they are sufficient to establish the fact. Complete blindness and deafness develop suddenly, generally about the fourth day after the commencement of the use of the drug. The deafness usually disappears in from twenty-four to forty-eight hours, while the blindness gradually passes off in the central portion of the field, but vision only partially returns in the peripheric portion. The ophthalmoscope reveals a condition closely resembling white atrophy. The veins and arteries are retracted and the optic nerves are bleached by the obliteration of their capillaries. So far as I am aware no attempt has been made to explain the *modus operandi* of this singular sequel to quinine. As typical cases illustrating this toxic effect of quinine, I quote the following cases reported in the *Transactions of the American Ophthalmological Society* for 1885, by Dr. E. Williams of Cincinnati. As no mention is made of the deafness continuing in the boy, I infer that he fully regained his hearing. To say that the use of quinine as here reported is silly is putting it mildly. But here are the cases:

"Dr. J. G. H., aged forty-two, of southern Kentucky, suffered a violent attack, eight years ago, of what was called congestion of the stomach. It lasted about a week, and was attended by severe pains, cramping attacks, and frequent vomiting and retching. With the impression that the trouble was malarious, he took quinine in heroic doses. It was administered hypodermically, per rectum, and on the raw surface of a large blister, endeavoring to retain twenty grains every two hours. During the attacks he thinks he took an ounce of quinine. In four days he became suddenly and totally blind and deaf, not being able to discern light, and hearing absolutely no sound. The only thing heard was the tinnitus. The deafness continued thirty-six hours, and the total blindness four days. In six weeks he was well and could see, as he now says, as well as ever. The hearing has never been completely regained. His field of vision is concentrically contracted in both eyes. The color sense seems to be now perfect. The optic discs are very white, all the capillaries having disappeared, and the calibre of the main arteries and veins being very much reduced in size. After the ophthalmoscopic examination, I was greatly surprised to find his central vision perfect in both eyes."

"The other case was a nephew of the doctor, fourteen years old. He was attacked about the same time, with similarly severe symptoms, lasting about as long as with the uncle. The boy was treated likewise heroically, and in the same ways, but the amount he took is not definitely known. He got suddenly blind and deaf, about four days after the severe attack of so called, congestion of the stomach. His color sense was very defective, and even with the best seeing eye he made serious mistakes. The atrophy of his optic discs is extreme. $V.=0.3$ in right eye, and with the left he can only count fingers at eight inches, centrally. There is evidently great contraction of his field of vision. He has a nystagmus, the movements being upwards and downwards, and he experiences very great difficulty in accommodating himself to sudden and great changes of illumination. These cases consulted me on the last day of the past month, and the day before I left home. Of course, in the hurry, I could not give them a more detailed and careful examination. But the pathognomonic symptoms are present. In the youth, there is permanent and very great impairment of sight."

PRACTICAL NOTES.

Meat Jelly, made at home.—There are a number of good meat juices and meat extracts in the market, but for nutriment and palatableness none of them equals the following, which I commend especially to those having a country practice. Take equal quantities of good juicy, lean beef, lean veal and lean mutton and cut them into half inch cubes or smaller. Put these cubes into a glass jar or wide mouthed bottle, *without any water or other addition*; cork loosely, or cover with two or three thicknesses of linen or fine domestic, tied on, and immerse the bottle in a pot of cold water. Let the pot stand by the fire, close enough to keep at a simmer but not come to a boil, for six or eight hours according to the amount of meat used. At the expiration of this period remove the jar and strain off the fluid while still hot; add salt sufficient to give the fluid a taste of it, and then put in a cool place to jellyfy. The product is a concentrated essence of meat, of high nutritive value and a delightful flavor. It may be given alone or with other nutriments, one to two teaspoonsful at a time every hour if necessary.

Ice in the sick room.—A saucerful of shaved ice may be preserved for twenty-four hours, with the thermometer in the room at

90° F., if the following precautions are observed. Put the saucer containing the ice in a soup-plate and cover it with another. Place the soup-plates thus arranged on a good heavy pillow, and cover with another pillow, pressing the pillows so that the plates are completely embedded in them. An old 'jack-plane', set deep, is a most excellent thing with which to shave ice. It should be turned bottom upward and the ice shoved backward and forward over the cutter.

Sharpening Hypodermic Needles.—A fruitful cause of abscesses in hypodermic medication is dull and rusty needles. The rust may be avoided by wiping the needles from time to time with rouge or crocus cloth, purchasable from any cutlery or hardware establishment. The finest emery cloth is too coarse for this use. Every physician ought to be able to sharpen his needles himself. The best hone for the purpose is that known as the Hot Springs or Washita razor hone. Thrust the needle, with the wire in it, through a bit of soft velvet cork long enough to come within a quarter of an inch of the commencement of the bevel point of the instrument. The cork will serve as a handle for the fingers and at the same time holds the needle stiff and taut. It is also a guide in preserving the proper bevel of the point. A few light rubs upon the hone will put a keen point on the dullest needle.

Tests for Bile in Urine.—There are several good and reliable ones easily applied. The tincture of iodine is a good reagent, that is nearly always at hand. If a few drops of it are allowed to trickle down the side of a test tube containing the suspected urine, in such a manner that it forms a layer on top of the fluid to be tested, if bile be present it will be indicated by a delicate layer of a sea-green color, which forms immediately beneath the iodine and sharply separates it from the urine beneath. As pointed out in the JOURNAL some time ago, chloroform is another ready and reliable reagent. A few drops of it are added to urine in a test tube and violently agitated for a moment. The tube is then allowed to stand until the fluids separate, the chloroform, sinking to the bottom. If no bile be present the reagent retains its bright color; but if there be bile in the urine the chloroform becomes turbid and of a greenish yellow color, the depth of the shade depending upon the amount of bile present. Nitric acid added to bilious urine gives it a bottle-green color which soon

changes to an olive green. A much more beautiful and delicate method of applying this test is as follows: Filter a small quantity of the urine through white filter paper and while the latter is still wet, touch it with the point of a glass rod that has been dipped in fuming nitric acid. If bile be present, even in very minute quantities, the point thus touched will display iridescent or rainbow colors, the brilliancy of which depends upon the amount of bile present in the urine.

Society Proceedings.

MISSISSIPPI VALLEY MEDICAL SOCIETY.

The twelfth annual meeting of this society was held in the Court House at Quincy, Ills., July 13 and 14, 1886. The first session was opened on Tuesday, July 13th, at about 2 P. M. Dr. Arch. Dixon, of Henderson, Ky., presided and the proceedings opened with a paper on "Yellow Fever in Brazil, Preventive Vaccination, Freire's Method, from Personal Observation and Experience," by Dr. H. M. Lane, of Carthage, Mo. After a short discussion of the subject Dr. Louis Bauer, of St. Louis, presented a patient upon whom he had performed laparotomy. The afternoon session then adjourned to afford the members an opportunity to register.

Upon reassembling in the evening, Dr. Ohmann-Dumesnil, of St. Louis, read a paper on "An Unusual Case of Lupus Erythematosus" presenting photographs of the case and a number of mounted microscopic sections. After quite a discussion, Dr. Barclay of St. Louis, read a paper on "Autophony" which was discussed at some length. The next paper elicited quite a discussion, being devoted to "Perineal Lacerations and their Treatment," by Dr. Arch. Dixon. Dr. I. N. Love, of St. Louis, then read a paper on "Artificial Alimentation," the discussion of which was deferred until the next morning session.

The next day, July 14th, the morning session convened at 9 A. M. Dr. Love's paper was discussed at length and at its conclusion Dr. Dudley S. Reynolds, of Louisville, Ky., introduced

a resolution to the effect that the society adopt the code of ethics of the American Medical Association, and that the members of the society bind themselves to abide by it. After quite an animated discussion the motion prevailed. A motion to appoint a committee to draft a constitution and by-laws also prevailed and the following gentlemen were appointed to serve in that capacity: Dr. Joseph Robbins, of Quincy, and Drs. Barclay and Wm. Porter of St. Louis. The committee on nominations was appointed and the session adjourned.

When the society reassembled in the afternoon, Dr. A. C. Bernays, of St. Louis, spoke of a case of epilepsy in which he had ligated both vertebral arteries. He also presented two specimens, one of twisting of the pedicle in an ovarian cyst and the other a double uterus, with extra-uterine pregnancy. This gave rise to quite an interesting discussion. Dr. Frank R. Fry, of St. Louis, then read a paper on the "Etiology of Chorea."

The committee on nominations then made the following report which was adopted:

President—Dr. I. N. Love, St. Louis, Mo.

First Vice-President—Dr. Jos. Robbins, Quincy, Ill.

Second Vice-President—Dr. Jacob Geiger, St. Joseph, Mo.

Secretary—Dr. J. G. Gray, Chicago, Ill.

Treasurer—Dr. Ohmann-Dumesnil, St. Louis, Mo.

Ass't Secretary—Dr. Edward Alcorn, Houstonville, Ky.

Committee on Arrangements.—Drs. Dudley S. Reynolds, Louisville, Ky.; Louis S. McMurtry, Danville, Ky.; Jos. H. Letcher, Henderson, Ky.; J. N. McCormick, Bowling Green, Ky.; L. B. Todd, Lexington, Ky.; Jno. Q. A. Stewart, Frankfort, Ky.; Jas. M. Holloway, Louisville, Ky.; and J. M. Matthews, Louisville, Ky.

The place of meeting, Crab Orchard Springs, Ky., and the time of meeting the second Tuesday in July, 1887.

"The Discovery of Anæsthetics," a long and interesting paper, was read by Dr. Henry M. Lyman, of Chicago, Ill. Dr. Amos Sawyer, of Hillsboro, Ill., read a paper on "The Therapeutics of Bismuth and Asclepias Tuberosa." Dr. Dudley S. Reynolds, of Louisville, read an excellent paper dealing with the "Errors of Refraction and Accomodation, with Methods of Testing these Defects." Dr. J. G. Gray, of Chicago, presented an instrument for washing out and treating the stomach, a short discussion following. Dr. L. H. Cohen, of Quincy, Ill., read a paper on "Elec-

tro-Therapeutics," which elicited some discussion. Dr. E. B. Montgomery, of Quincy, followed with a paper on the Therapeutics of Hot Water," which brought out a lengthy discussion. This closed the session. A resolution was then adopted offering the usual thanks and the society adjourned to meet in a year.

In the evening the members repaired to Dr. McMahan's residence where a reception was tendered to them, and to which they had been previously invited during a session of the society.

Book Reviews.

LA LIMONEA CLOROIDRICA nell' ultima pandemia di Colera, etc., etc. Pel Dottore Ottavio de Stefano. Napoli; tipografia della Reale Accademia delle Scienze, etc. 1886.

In this monograph of 136 pages, large 8vo., Dr. Stefano gives a history of the experiments and facts which led to his adoption of the treatment of cholera by the administration of dilute muriatic acid in the shape of a lemonade (*limonea cloroidrica*), and of the cures made during 32 years by the use of the remedy alone. A large portion of the text is controversial, dealing with the numberless publications made upon the subject of cholera-cures during the various epidemics of that disease that have affected Italy since 1854, when the author first introduced the treatment. Especial attention is given to the "enteroclysmas" of tannic acid and of chloride of sodium, as proposed and practiced by Cantani and others, and statistics are brought to bear upon them which show that the mortality among those treated by these methods was exactly the same as the death rate where no especial method of treatment was followed. Over one-third of the book—or 52 pages out of 137, is devoted to tabular statements from Dr. Romeo, of Marseilles, and Dr. Virgilio of Volturno, giving the results of the treatment of cholera (during the late epidemics) by the hydrochloric lemonade method, as compared with all other treatments; and if statistics of this sort are worth anything, these tables would seem to prove that the acid is indeed the specific which Dr. Stefano proclaims it to be.

A singular fact in regard to the work is that nowhere in it does the author state exactly what is meant by his "chlorhydric lemonade," how it is administered, or in what doses. Incidentally we learn that a solution of the acid in water, 1 part of the former to 1800 of the latter, has been found to be sufficient. The only mention of quantity occurs in one of the tables where a patient was made to take "another litre of the lemonade," leaving the inference that one litre, at least, had been administered. Indeed throughout the whole work (which we read very carefully) if the author's intention had been to suppress all information as to the nature of the remedy he could not possibly have succeeded better. He seems to think that everyone has read his communications to *Il Progresso* and the *Gazzetta degli Ospitali* and consequently knows all that is necessary concerning the medicine and its method of administration.

Medical and Surgical Directory of the United States.—

By R. L. Polk & Co., Detroit, Mich., pp. 1452, 8vo. Price \$7.

This is an elegantly printed and bound book and arranged so systematically that a physician cannot fail to easily obtain whatever information he desires concerning the medical profession anywhere.

Among the many features of its contents we notice the names of physicians arranged by states, and then alphabetically for the United States; medical colleges in the United States and Canada; medical journals in the United States; United States Army, Navy and Marine Medical Corps, Roster of pension examining surgeons; directory of business pertaining to the medical profession; all information concerning the medical associations and societies; medical register, directory and laws of each state; and various other items that will be constantly referred to.

We can say no more than that it is complete.

Hydrophobia; M. Pasteur and his methods. By Thos. M. Dolan, M. D., M. R. C. S., etc. London, H. K. Lewis, 136 Gower St. 1886.

This pamphlet of 55 pp. 12 mo. is a critical review of the whole question of inoculation for the cure of rabies, as practiced by M. Pasteur, undertaken in a truly honest and scientific spirit and with due regard for M. Pasteur's great name and past achievements. The conclusions reached by the author are that

while it is not yet proven that M. Pasteur has succeeded in isolating the rabietic poison, or that his inoculations are either a certain prophylactic or a cure for the bite of a rabid dog, yet his work is of the very highest value, and cannot fail to have a beneficial result. It will encourage research, and if it has done no more, the mere fact that it has produced a feeling in the masses that hydrophobia is no longer outside the pale of medicine, it has accomplished a great thing. Hitherto the mental suffering of one bitten by a suspicious animal has been one of the most trying features in the treatment of such cases. The effects of mind upon matter are so great, so varied and so wonderful, that it is difficult to overestimate the value of the factor Hope. We commend this little work to the careful perusal of all unprejudiced medical men, in the firm belief that it presents a fair statement of the whole question as it now stands.

BOOKS AND PAMPHLETS RECEIVED.

The Pennsylvania Hospital.—Report of the Board of Managers for 1885–86.

Medical College of Ohio.—Sixty-eighth Annual Announcement; session of 1886–7.

Report of Proceedings of the Illinois State Board of Health. Quarterly meeting, Springfield, June 29–30, 1886.

Cincinnati College of Medicine and Surgery.—Announcement for 1886–87. Fifty-second Regular Session.

Illuminated Official Programme of the autumnal festivities at St. Louis, Mo., for 1886. Compton Lithograph Co.

The Treatment of White Swelling of the Knee. By A. B. Judson, M. D. Reprint from *N. Y. Medical Journal*.

Missouri Agricultural College and University.—Forty fourth annual catalogue and Report to the Governor. Columbia, Mo.

Homœopathy as viewed by a member of the Massachusetts Medical Society. By Vincent Y. Bowditch, A. B., M. D. Reprint from the *Boston Medical and Surgical Journal*.

Accidental Divulsion of Pterygium leading to an improvement in the regular operation. By A. E. Prince, M. D., of Jacksonville, Ills. Reprint from the *Archives of Ophthalmology*.

Mound City Photographic Stock House.—Illustrated Catalogue of instruments, materials and appliances used in photography. St. Louis, H. A. Hyatt, 1886. (Large 8vo., pp. 200, profusely illustrated).

Atmospheric Purification.—A method of prevention of erysipelas and other septic and infectious diseases incident to surgical operations, etc. By David Prince, M. D., Jacksonville, Ills. (Second edition of a reprint from the *American Practitioner and News*).

Catalogue of Books on Microscopy, Micro-Natural History, and the allied sciences. W. P. Collins, 157 Great Portland St., London. W. [A valuable catalogue of new and second-hand books on zoology, micro-botany, etc. Some of these are very rare and all cheap).

The Journal fuer Zahnheilkunde is a new monthly dental journal which has just made its appearance. It is published in Breslau with Dr. Erich Richter as its editor. It is the organ of the German dental societies in America and is full of interesting matter, the first article on Diseases of the Buccal Mucous Membrane, by Dr. Kuznitzky being particularly interesting.

Another New Journal.—We have received the initial number of the *Alabama Medical and Surgical Journal*, an eighty page monthly published at Birmingham, Ala. It is edited by Drs. J. D. S. Davis and W. E. B. Davis, and is, we believe, the only medical journal in the state. We wish our confreres every success in their new undertaking and hope to find every succeeding number as bright and newsy as the one now before us.

[August,

Melange.

Dr. J. C. Brownell, so well known to microscopists, and especially to the members of the American Society of Microscopists, by his beautiful slides of pollens mounted in wax cells, died in Florida a few days ago. We have not learned the particulars of his death, but it will be a sad announcement to the A. S. M. soon to convene at Chautauqua.

Accident to Dr. Herff.—We learn from *Daniels' Texas Medical Journal* that Dr. Herff, the widely known surgeon of San Antonio recently met with a very serious and possibly fatal accident. He was thrown from his buggy while driving from town to his country home. We sincerely hope that the doctor may not be so badly hurt as at present reported, and that he will have a rapid recovery.

Death from Bromidia.—A telegram to the *Austin Statesman* from Waco, Tex., announces the death on July 6th, at the latter place, of Dr. Jos. Willis from an overdose of bromidia, taken for the relief of pain. The *Texas Medical Journal* speaks in very high terms of the deceased, who although only thirty-eight years old, had been for several years a prominent member of the Texas State Medical Association.

A Good Move.—Drs. Richard H. Day and J. W. Dupre, both of them ex-presidents of the State Medical Association of Louisiana, have inaugurated a move among the physicians of their state that cannot fail of being a success in every way, viz: a Physician's Mutual Benefit Association of Louisiana. A charter has been obtained and the membership is said to be increasing rapidly. It is a wonder that something of the sort has not been started in this city, with its eight hundred physicians.

The St. Louis Dairy Company has adopted a novel plan of convincing the physicians of the city that their dairy furnishes pure milk and other dairy products properly prepared for market. The company has issued invitations to the doctors and their families to take an excursion to their dairy at Formosa, Ills., on the Vandalia R. R., eighteen miles from the city. A special train will leave the Depot at 9 A. M. on the 3rd. inst., to convey the

party out and return. It will be a pleasant trip and no doubt a large number of physicians will avail themselves of the opportunity to get a little fresh air and good cream.

The Medical and Surgical History of the War of the Rebellion.—A letter from Surgeon Huntington, in charge of the Surgeon General's Office, Washington, D. C., informs us that the last volume (VI) of this great work is now in the hands of the printer and will probably be ready for distribution during the coming winter. The greatest credit is due to the Surgeon General's Department having this work in charge. Nothing like it has ever been issued by any other government on earth, and it will stand for all time as a monument to the skill and labor of the surgeons of the United States Army, and to the liberality of the Government.

The Medico-Chirurgical College of Philadelphia.—Several notable changes have recently taken place in the faculty of this institution. Prof. Wm. H. Pancoast, who for twenty-seven years has been teaching Anatomy at the Jefferson Medical College, has resigned his Professorship in that institution and has accepted the same chair in the Medico-Chirurgical College to which he was elected by the Trustees. He brings with him the extensive Anatomical Museum collected by himself and his father, and which for so many years was employed in teaching at the Jefferson College. Dr. John V. Shoemaker, lately lecturer on Dermatology, and teacher of Skin Diseases, in the Post-Graduate Course at the Jefferson College, has become Professor of Dermatology at the Medico-Chirurgical. Dr. E. E. Montgomery, Obstetrician to the Philadelphia Hospital, and Surgeon to the Women's Hospital, has been elected Professor of Gynecology. Some other changes have been made but not yet announced. They will be found, however, in the annual announcement when that appears.

Dr. Arthur K. Taylor, one of the oldest and best known physicians of Hot Springs, Arkansas, died at that place on June 19th, of epithelioma of the face. The deceased was a native of North Carolina, and at the time of his death was not far from the limit of "three score and ten." The writer knew him intimately in Memphis, Tenn., where he practiced years ago, and a more genial, kind-hearted and generous man never lived. Prior to the death of his wife (whom he always spoke of and everybody knew as

'Sue') Dr. Taylor was a great practical joker, his wife whom he loved tenderly and devotedly, being often the subject of his mischievous pranks. After her death a great change came over him in this respect, and though he was enjoying a good practice in Memphis, the place seemed to have lost all charm for him and he moved to Hot Springs. Old Memphians—those who lived there from the close of the war to 1875, wherever they be scattered will learn of Dr. Arthur Taylor's demise with feelings of sorrow, and each one will feel that he has lost a personal friend. His death removes almost the last one of the 'old set' of gentlemen,—lawyers, physicians and journalists, that made Memphis in those days one of the pleasantest places in the world. What times they used to have when Dr. Arthur Taylor, Dr. Irwin, Ed. Yerger, John Sale, Sam Walker, Birney Marshall, Charley McLean, Dr. Joe Lynch, Dr. Paul Otey and a few more happened to drop in at Madame Vincent's for a lunch! They have all gone—even the jolly, kind-hearted madam,—gone over to the great majority, and Memphis, no matter how prosperous she may become, can never again be the same to the men who knew her in those days.

The Kansas City Medical Index, after stealing a witticism at our expense from a New York journal, asks "Can you speak English correctly, brother James!" English English, or even good American English, presents but few difficulties which I cannot surmount. With Kansas City English, however, I am not so familiar; but as I have a good knowledge of Dog Latin I am hopeful of acquiring Hog English—whenever it shall become necessary for me to resort to the *K. C. Index* for medical information.

Necroptic Entomology.—An idea that seems at the first announcement chimerical and wild, when closely examined is sometimes found to contain the germ of valuable matter. Such an idea was the one advanced at a recent meeting of the Académie de Médecine by M. Laboulbène who said that entomology might render very important medico-legal service in determining the probable date of death of a cadaver. The carrion insects of earlier decomposition leave their spoil in a regular order of succession, and even the anthrenes and ptionioses of the last decomposition seem to come and go in regular rotation. So, after all, there is nothing absurd in the idea of necroptic entomology.

Dr. Von Gudden who died a victim to duty while attending upon the late unfortunate monarch, Louis II. of Bavaria, was a native of Cleves, studied at Berne, Berlin and Halle, and received his "doctorat" in 1848. He was made director of the insane asylum at Werneck in 1855, whence he removed to Zurich and accepted the chair of psychiatry in 1869. In 1872 he was called to Munich, taking the chair of psychiatry in the university there, and being appointed director of the insane asylum of that city. Dr. Von Gudden is known to microscopists as the inventor of a microtome for making sections of the entire brain, and for his work in the histology of the brain and nervous system. He had also done a good deal in the study of parasites and had published a work on skin diseases caused by them.

The attitude of some men toward office is that of the historical old maid toward matrimony. She had been in this vale of sorrows a long time and was getting mighty weary of watching and waiting for a husband. She could not sew; nor bake bread; nor clean up a house,—at least nobody ever saw her doing anything of this sort, but she was very eloquent and one day she concluded to try her eloquence upon the Lord. She went down into the wilderness and kneeling under a tree, prayed long and fervently for a husband. While she was sending up a silver-tongued appeal to the throne of grace, an owl overhead screeched out *Who-who-oo*. Thinking that her prayers were about being answered she exclaimed joyously—"Anybody, Good Lord! Anybody, so it's a man." Anything, good people! anything—so it's an office. If I can't be coroner give me the City Hospital, and if I can't have *that* give me the Lunatic Asylum.

The Mental Alienation of Blue-Beard.—Antiquarians have settled among themselves with singular unanimity that the original of Blue-Beard, the terrible and blood-thirsty old bogey that shared the honors in our nursery days with Jack-the-Giant-killer, was a certain Chevalier de Retz or Rays, who lived in the early part of the fifteenth century. A singular bit of history in relation to this monster, recently published in France, is of interest to physicians, in-as-much as it furnishes a veritable clinical observation in the study of a peculiar form of mental alienation,—*folie impulsive*. It is a letter written by de Retz, after his condemnation, to king Charles VII of France, and now published for the first time, that we are aware of, in English. De Retz, or to

give his full name, Gilles de Laval, Chevalier de Retz, was a most noble and powerful knight, a marshal of France, a companion and fellow-soldier of Joan of Arc. After the tragic death of La Pucelle he retired to his castle of Machecoul in Brittany, and there gave himself up to the excesses and cruelties that have made his name infamous for all time. He did not, however, as told in the nursery story, marry inquisitive maidens and murder them for gratifying their curiosity, but he did far worse, as will be seen by the letter produced below. We find the original text in a work by Julian Chevalier on the *Inversion of Sexual Instinct, medico-legally considered*—a work already noticed in the JOURNAL (February '86, p. 87). After having murdered over eight hundred children in the gratification of his horrible passion, De Rays was finally brought before the Court of Brittany, tried, found guilty and condemned to be burned at the stake. He appealed to the King for a commutation of sentence, in a letter of which the following is a partial translation. After the usual formalities, he says: "I do not know how, but of my own self, without counsel of anyone, I concluded to act thus (as detailed in the *acte d'accusation* and trial) solely for the pleasure and luxury it afforded me. In fact I found incomparable delight in murder, doubtless by the instigation of the devil. It is eight years now, since this diabolical idea came to me. One day being by chance in the library of the castle, I found a Latin book describing the lives and customs of the Cæsars of Rome. It was written by a learned historian by the name of Suetonius. The said book was adorned with pictures very well painted, which showed how these pagan emperors lived; and I read in this beautiful history how Tiberius, Caracalla and other Cæsars slaughtered children and took pleasure in torturing them (*et prenaient plaisir à les martyriser.*) Upon this I determined to imitate the said Cæsars, and on that very evening I commenced to follow up in earnest and carry out the text and the pictures of the book."

He goes on and recites how two of his retainers, Henriët and Pontou by name, were instructed as to his desires and became the purveyors of victims for his horrid orgies. He continues, "I abused these children for the ardor and delectation of luxury which their sufferings caused me. Afterwards I caused them to be slain by these fellows. Sometimes I made them cut the throats of the children, severing the heads from the bodies. Sometimes I crushed their skulls by blows of a heavy stick. Sometimes I

removed their limbs, removed their entrails, hung them on iron hooks to cause them to languish, and while they were languishing to death, I had connection with them. Sometimes I did the same after they were dead. Oh, I had great pleasure in seeing the most beautiful heads of these children after they were bloodied."

Further on he says, "as to those slain, their bodies were burned in my chamber, except some very beautiful heads which I kept for reliques. I do not know how many were thus killed, except that the number was more than one hundred and twenty each year." Finally he appeals to the king thus, "I have often lamented that I left your service, most venerated Sire, when I did so, some six years ago; because if I had not done so I would not have come to this; but I must confess that I was led to retire to my estate by a certain furious passion and desire which I felt toward your son, the Dauphin of France, such that I would not have failed to have slain him some day, as I have since slain so many innocent children, by the secret temptation of the devil. I conjure you, Sire, not to abandon me, your humble servant, your chamberlain, your marshal of France. Spare me and let me expiate my crimes by retiring to a monastery, after the manner of the Carmelites".

The prayer was not granted. Condemned to death by the Court, he was burned at the stake, along with his accomplices and tools, in the town of Nantes in 1440. The ruins of his castle of Machecoul are still to be seen. As remarked by Chevalier, we have here an example of homicidal mania accompanied by perversion of sexual instinct, exactly the counterpart of cases frequently seen now-a-days. Fortunately, however, they do not have the opportunity of gratifying their mania to the same extent as did the horrible monster whose story is thus related. Those were days of demonomania, of sorcery, of beliefs in incubi and succubi, and an almost universal priapism. Crimes against nature could not fail to be the most common events, and the result was the monstrous phenomenon "Blue-Beard."

A High Compliment to a distinguished Texas Physician.—Under this heading we find in Daniels' *Medical Journal* for July the following rich announcement which will be appreciated at its full value by a number of local physicians (and possibly others) who received similar documents from Sir Henry V. Goold Bart. "Dr. Q. C. Smith, of Austin, Texas, has been made a Fellow of the Society of Science, Letters and Art of London, and has

received his certificate, with the compliments of, and an autographic letter from the Hon. President, Sir Henry V. Goold—Bart.” Not having forwarded, the “5 shillings” we didn’t get our certificate.

DEATH OF DR. VAN STUDDIFORD.

We learn, just as the JOURNAL is going to press, that one of the oldest and best known of our local physicians, Dr. Henry Van Studdiford, has quietly passed from among us and gone over to the great majority. He died on Sunday, August 1st., at 8.30 A. M., having been confined to his bed but a few days—although he had been more or less of an invalid for several years. A more extended notice of him will appear in the Journal for September.

AMERICAN RHINOLOGICAL ASSOCIATION.

This association, as its name indicates, confines its proceedings to the discussion of subjects allied to the diseases of the nose and their sequences. The next meeting will be held at St. Louis, Mo., on October 5th next. A physician who desires to become a member of this association *must* submit a paper written on some subject that promotes the objects of the society. This must be sent to the secretary not later than *one month* before the meeting. Members of the association must send in the subjects of their paper to the secretary by the first of September next.

All information concerning the meeting will be furnished upon application to Dr. P. W. Logan, Knoxville, Tenn., Dr. Allen De Vilbiss, Fort Wayne, Indiana, or Dr. Thos. F. Rumbold, of St. Louis, Mo.

Hydroleine, See Adv. Page 8.

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THE SAINT LOUIS Medical & Surgical Journal.

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Original Contributions.

BACTERIA AND DISEASE.*—BY J. T. BURRILL, PH. D., President
of The American Society of Microcopists.]

Fellow members of the American Society of Microscopists:

I am to address you to-night upon a class of living things of whose very existence nothing was known nor could have been known except by the aid of the microscope. Since the latter, though now perhaps the most nearly perfect instrument of man's mechanism, is of recent origin, the minute organisms of which we speak are new to human knowledge. In fact no considerable attention was paid them until within the memory of the majority of the members of our society, about thirty-five years ago. The classic researches of Schwann, of De la Tour, of Pouchet and especially of Pasteur upon fermentation and spontaneous germination at length caused careful studies to be made upon the these the least in size of nature's animated existences. Then the observed evidences that the bacteria held some relation to disease, (first seriously suspected in the case of anthrax or splenic fever in cattle, afterward demonstrated to be the cause of this dangerous malady by Pasteur and Koch) brought them prominently into notice. Now, for twenty years the literature upon the nature and effects of bacteria has been steadily growing, until to-day it is scarcely possible for one man to keep track of the voluminous

— *The Annual Address before the American Society of Microscopists at Chatauqua, N. Y., Aug. 10, 1886.

pages devoted to them. It is to these organisms that I now invite your attention.

It is well known that if we leave meat broth in a warm place after a few hours an ill scented odor becomes perceptible. We say the material has spoiled, is tainted, or that putrefaction has commenced. If the liquid was filtered in the beginning, it will be noticed that the clear fluid under the conditions named becomes opalescent and finally milky or turbid. If now we examine a drop of the material under a power of three hundred or more diameters, we find the field of the microscope alive with minute organisms, of perhaps various shapes, and, notwithstanding their minuteness, differing considerably in size; without color; but marvellously endowed with the power of motion.

In surprise and admiration we gaze at the wondrous spectacle, a busy maze of motion, rolling over and over, spinning like a top, whirling like a windmill, freely dancing up and down in the thin film of the liquid pressed between two pieces of flat glass, now pausing as for rest, or gently swaying back and forth as if attached by an invisible filament at one end, now off like a flash now sailing with stately mien and dignified bearing through the ocean beneath our eye. It is impossible to avoid asking ourselves: Whence this teeming life of the microscopic world? The first sight is enough to make us want to know more of the tiny population of this newly-discovered fairy-land. What are these busy creatures? What of their origin of their structure, of their modes and terms of life, of their relations and effects?

A hundred questions press themselves upon us for answer, a thousand problems await solution—questions and problems springing, perhaps, at first, from a stimulated curiosity, but destined to affect the march of human progress, to prove great factors in the evolution of human history, to contribute to the health and happiness of man, to conspicuously aid him in gaining grasp and mastery of the facts and forces of earth, and so ultimately to secure for him the imperial dominion announced in the beginning by the self same Creator of the little organism, and of rational, thoughtful, God-like man. Thanks to the marvelous instrument which in its later day evolution of perfection renders possible the kind of work that brings us together for mutual gain and encouragement, many of the secrets of this tiny but thronging population of the otherwise invisible world have been made known.

The revelations are astonishing, the results surpass the widest reach of imagination, and penetrate to foundations never dreamed of in philosophy. We have come to know that, with other things as they are in the world, the bacteria and their allies are absolutely indispensable to the physical existence of man. Without them the earth would be as uninhabitable as the volcanic, rock-riven face of the moon. Destroy them now and the fertile soil upon which we depend for food would speedily lose its capacity to support green vegetation.

All organic substances would continue substantially as they are, or at least as they must be without the processes of fermentation and decomposition. The richness of the tillable soils is largely due to partially decomposed or decomposing matter. Deprive our fields of this, and they become barren wastes, sterile and inhospitable clays and sands, to the vision of their once prosperous and happy but now doomed and perishing occupants. It is even probable that without the aid of the bacteria normally living in our own bodies, some of our necessary physiological processes would cease, and we would perish in another way in consequence of the withdrawal of these tiny workers.

But if we are indebted in many ways to the activity of these minute organisms, indebted indeed to them for life and health, we are learning to score up against them long and large accounts upon the other side of the ledger. They are pre-eminently destroyers. Their office is to reduce, to tear down. We are obliged to protect many valued substances in some way or other from their ravages.

All the processes of food preservation as of salting, smoking, drying, canning, etc., are directed to this end. It was formerly taught that fruits, vegetables, meats, etc., were put into hermetically sealed vessels to exclude the oxygen of the air as the destroying agent. We now know that cotton wool as a stopper, through which the strained air freely passes, is as effectual as a porcelain lid with rubber fitting in the preservation of putrescible substances.

In either case we must first see that the living organisms are killed by heat or otherwise and then that these latter, not the elements of the air, are kept out. A cotton plug previously subjected to a temperature several degrees above that of boiling water will effectually do this, and boiled fruits, meats, etc., will remain

sweet forever while thus inclosed. An experiment of this kind properly carried out will teach most valuable lessons as to common phenomena of nature to those willing and able to learn from such instructions. Without living organisms milk and cooked vegetables do not sour, the expressed juices do not yield alcohol, neither piles of green vegetation nor the accumulation of stables become hot, wood does not decay, animal flesh does not putrefy, butter does not become "strong," water in tanks is not tainted, rivers are never sewers of pollution and offense.

Should we stop here the account against the bacteria and their associates forms upon the debit pages innumerable columns, whose footings no one can adequately realize. But we have a still more serious charge against these liliputian foes. They are the agents of disease and death among plants, animals and men. No fanatic among the microscopists has ventured to assert that all diseases are caused by bacteria, but the truth is, as we learn more and more about them and their effects, we find in the list of maladies more and more of these to be parasitic in origin.

All communicable diseases (not including hereditary ones,) must be put down in this class, besides many that are not passed from individual to individual in the ordinary course of life. What an enumeration may now be made! The long roll inscribed against the sky would be more dismal and threatening to the vision of the suffering mortals than any blackness of natural clouds, carrying evidence of the worst meteorological commotions.

We daily walk through vicissitudes of danger. If we are not often injured, it is because our bodies are so wonderfully contrived to resist attack, and that our physiological powers are greater than those of our enemies. Fortunate indeed is it for us in our day that we have succeeded in offering battle so successfully. Man is still, in some circumstances, and conditions, cut down as the grass; as a flower of the field, so he perisheth, but it does not require much historical research to show that the simile was emphatically just in former times.

What were the calamitous visitations, oft-times attributed to the anger of the gods, by which whole tribes and people were swept from the earth? What was the plague described by Gibbon, which during fifty years in the sixth century destroyed a large proportion of the population of the Old World? What was the black death, which is said to have annihilated one-third of the

people of Europe, in the fourteenth century? What of the depopulation of London by the plague two hundred years ago? What wholesale slaughter occurred among the original inhabitants of North America by smallpox introduced from across the seas?

This latter disease, and others like it, still have their victims but thanks to the experimental and inductive science, especially of our century, relief has come to the civilized world.

Instead of ascribing these awful calamities to the visitations of providence, and meekly submitting to the inevitable, we have come to recognize that even plagues and pestilences are subjects of scientific investigation, and that effects, as we observe them, have adequate and comprehensible causes. Thanks very largely to the microscope, we are now able to ascertain the causes of communicable diseases. Many of them have been found, and we are patiently but certainly gaining reliable information day by day, by which we may be trustfully guided in our struggle for existence against foes no longer invisible and unknown.

First, what are bacteria? Nothing need here be said as to their appearance, structure, or place in a classification of natural objects, but we may especially ask whence their origin? It is certainly important in our discussion of the origin and occurrence and recurrence of disease that we should understand as fully as possible all the circumstances and conditions connected with the beginning and distribution of the disease agents. Let it be taken as scientifically settled that living organisms do not spontaneously come into existence through some transformation of inorganic materials. We need not say that this never has occurred, nor, in fact, that, it may not, under some peculiar circumstances or conditions, be true now, but evidence is so abundant that this process does not take place in the usual course of affairs, that we may exclude it altogether in our practical relations with the objects. We have then only to ask, are the bacteria independent, autonomous existences, or are they temporary modifications of other living things. It has been held by competent observers, that in certain conditions, various species of fungi become so modified in their growth as to assume, temporarily, the form in which we observe them as bacteria. Various accounts have been given, in scientific publications, of the observations upon such changes. These, however, are mostly by men not especially familiar with the actual development of the organisms in question. We posi-

tively know that some of these assertions are untrue, for when less fallible means are employed in experiments of the same kind, other results are uniformly obtained. By many, however, the idea is not entirely abandoned. During the last year in a reputable scientific publication in France, a series of articles, based upon elaborate and extensive experiment and observation, have appeared in which the author endeavors to show that the so-called microbes (bacteria) are nothing more than vegetative states of a common mould (*Penicillium*). In a similar way, but apparently with more reason, a well-known German investigator announces the derivation of yeast plants (allied to bacteria) from the smut fungi (*Ustilagineae*).

- Recently a paper has appeared in our own country in which the author, upon theoretical grounds, concludes that bacteria owe their origin to the metamorphosed tissues of animals, a view previously put forth. A sharp discussion occurred two months since in the French Academy of Medicine, between Pasteur and Bechamp, the latter holding the ground that microbes of the various genera and species are transformed into somethings which he calls microzymas. These latter according to Bechamp are definite associations of chemical molecules, existing from the creation of matter, and capable under proper conditions of becoming transformed into low and simple forms manifestly endowed with life and its activities. It is not the older idea of spontaneous generation, for the microzymas are special organizations already possessing the power and potency of life, but quiescent or latent. In the open meeting Pasteur combatted Bechamp's results, the hot discussion reminding one of several similar ones in which it will be remembered the former distinguished contestant came off victorious.

But a commission has been appointed to examine into the matter of Bechamp's microzymas and we shall before long know the opinion of the examiners.

The concurrent testimony of the best and most expert investigators now is that bacteria are true and distinct existences, having real genera and species, propagated like other living things from individuals to individuals—if we cannot so properly say—owing to their methods of simple division, one into two, two into four, etc.,—from parent to offspring.

Secondly, do bacteria cause disease? Admitting the existence of bacteria, and the perpetuity of their specific forms, the proof that they have anything to do with the cause of disease is constantly challenged. It would almost seem that men are determined not to accept proof in this case, however strong it may be. Large numbers of the medical profession appear to pride themselves upon not accepting "new fangled ideas," whatever the basis of evidence. Quote your authority to them on this matter of parasitism and the sufficient reply is, "O, he is a bacteria crank!"

Now, I have profound respect for the profession of medicine and for the men who laboriously and conscientiously practice the healing art, whether they accept any special ideas held by myself or not; but I respectfully submit that one who personally and experimentally knows nothing upon a given and particular subject, no matter what may be his information upon other matters, or how broad his knowledge or great his fame, is not a competent judge upon the special thing of which he is confessedly ignorant.

Certainly too many medical men, as well as others, have not recognized this apparently axiomatic truth. Witness the discussion upon the etiology of disease in the meeting of the American Medical Association at St. Louis, in May, 1886. The "microscopic bugs," according to one speaker, had received of late altogether too much credit as causes of disease! It is ever thus. Old ideas die hard. We hear a good deal, fortunately not so much as formerly, about the conflict of science and religion, and we cannot disguise the fact that there is a conflict, deep and earnest oftentimes sore; but it is a conflict again between the new and the old—not of truth or about truth, but of men's changing ideas of truth.

Among those whose business it is to deal with the therapeutics of disease, we find more and more of the younger men intelligently accepting the bacterial etiology of disease.

We must not, we do not by any means ascribe all forms of disease conditions to parasitism. Our corporeal machinery is altogether too complicated, too delicately adjusted and balanced to run smoothly forever without friction and jars from internal and inherent failings. The vicissitudes of circumstances and of conditions are too varied and vigorous to count for nothing upon our sensitive organism, and the influence of mind on body is by

far too great to be passed unheeded as a factor in disease; but we may fearlessly assert without reservation of any kind that all truly infectious and contagious diseases are due to some kinds of parasites.

Each of these maladies has as its immediate cause a living thing distinct from the body itself, capable of independent growth under the proper conditions outside of the body, possessing the power of self-perpetuation or reproduction and multiplication, endowed with specific characteristics, and animated and controlled by a spark of that same mysterious quality or substance—whichever it is—which distinguishes ourselves from the inorganic dead clods of earth, the quality or substance known to us as vitality or life. Where this last comes from, and how it is associated with the minute speck revealed by our microscope, science cannot tell. Homogeneous immersion lenses fail utterly to give us instruction in this important particular.

Not all communicable diseases are, however, due to bacteria. Scabies, or the "itch" of the olden time, is in consequence of an eight legged mite; some of the mold-like and yeast-like plants infest, to our discomfort, the human body; trichinæ and numerous other worms are causes of disease, and recently it appears to have been established that malaria is to be charged to the account of minute amœboid animals, making tenements of our blood corpuscles.

But making these and other exceptions, the bacteria may yet be said to be the disease producers, the parasites of contagious diseases, as well as many maladies not considered communicable. Whether tuberculosis (consumption) is always directly derived by contagion is not settled, though that the morbid processes are due to *Bacillus tuberculosis*, a specific and well-known organism, ought to be universally accepted. The statistics of the hospitals do not yet show that this disease increases in consequence of the admittance of tuberculous patients.

The report of a committee of the Société Médicale des Hôpitaux, France, gives the number of actual observations as 439. Of these 113 were favorable to contagion, and 226 hostile as understood. Of the first series there were 107 cases between married couples, 71 between near relatives, 18 from child to parent 16 between distant relatives, and 2 from man to dog.

Whether or not the tuberculosis as it exists always passes directly from the diseased to the healthy, it is positively a virulently contagious malady, and the sooner this is recognized the better for human life and sanitary science. The disease can at any time be communicated by inoculation to healthy animals, and this from strictly pure cultures of the specific microbe. Keep this latter strictly away and we shall suffer no more from the peculiar and dreadful scourge which now inflicts such untold misery upon our race. As we come to know more about the various methods by which the virus is conveyed, we shall be better able to escape its contagion. It is now thoroughly demonstrated that tuberculosis may be conveyed through the food, a method, no doubt, which has obscured the real contagious character of the disease.

We are also speedily coming to recognize that all acute suppurative processes are chargeable to bacteria. What an era of progress in surgery is this of our day! What inestimable blessings to the maimed and unfortunate has come since Lister first experimented with his cleansed instruments and antiseptic dressings.

What needless pain has been spared and how many lives have been saved by the progress in surgery since the memorable date of 1865.

An operation (ovariotomy) which previous to that time was considered well nigh fatal, and twenty per cent of deaths in spite of the highest attainable skill, has been performed one hundred and thirty-nine times in the two years, ending December, 1885, without a single death, by Lawson Tait, of England, and others are having almost as marvelous success.

It used to be said when skin eruptions occurred, when boils, felons, abscesses, carbuncles, etc., affected the suffering, that "the blood was out of order" and various and powerful were the prescriptions therefor. Perhaps the most of us can remember the regular sulphur and molasses treatment every spring-time to dissipate the evil accumulations of inactive winter. Even now it is supposed by many that irritants like croton oil applied to the skin produce suppuration, but investigations show that in none of these and similar instances is pus formed without micro-organisms as the true agents.

Again we have come to understand that many diseases not commonly conveyed from the sick to the healthy are directly con-

nected with the food and water consumed. Multitudes of cases are on record where sickness has been attributed to canned vegetables, preserved meat, fish, milk in various shapes and methods, edible mushrooms, etc.

These and similar results are due to the microscopic living agents of fermentation and putrefaction, either by their direct action when taken into the stomach, or through the accumulations of poisons produced by them in the decomposing materials. Milk is peculiarly liable to fermentative changes and so dangerous as food when improperly handled.

Let it not, however, be understood from this that all fermented products are necessarily unhealthful. It is only when certain specific changes take place that danger exists. It behooves us to find out what and why.

But the most dangerous of such contaminations are those finding their way into drinking water, and among all the deplorable records in the tables of sanitary science are those of typhoid fever, certainly a parasitic disease, and almost wholly communicated through the agency of water.

It is stated that there are annually in the United States twenty-five thousand deaths from this wasteful disease, representing one million, five hundred thousand cases. The one million, two hundred and fifty thousand, who recover, lose at least six weeks from the activities of life besides the care entailed upon attendants, and the miseries of the sick chamber.

Third, HOW DO BACTERIA CAUSE DISEASE? In all this talk about bacteria as disease agents, we are apt to think of them as specially distinct and different from all other living things, perhaps as endowed with some venomous properties like poisonous snakes among animals. But the fact is, these microscopic organisms are simply plants, living and dying, growing and multiplying, under conditions as circumscribed and laws as immutable as those which limit and govern other vitalized beings or things.

Most species of bacteria are confined to a regimen of dead organic matter. They riot in the carcass of a dead animal that they were wholly unable to injure in the living state. Other species, still greater in number than those to be next mentioned, manage to grow and multiply on or in living things only when the ramparts of the latter are broken down, when the defences are weakened, when the ebb and flow of the vital current is by other

means reduced or deranged. Bacteria that without help can not get through the skin upon one's arm, may readily do so by the aid of croton oil or cantharides. Those which ordinarily cannot pass the ordeals of the stomach, may do so in cases when the latter fails to excrete its normal juices by the untoward influences of unhygienic food.

Finally, certain species much fewer in number than the preceding, seemed to have powers of invasion altogether surpassing the defences normally offered by many individuals. These are the organisms of true contagions, like small-pox, scarlet and yellow fever, measles and cholera. Yet even with these last the struggle is ever going on. In the worst epidemics certain persons remain unharmed, not because the disease producers are wanting, but because their physiological activities are more than matched by those of the exempt party. And the same person may offer far greater resistance to these destroyers at one time or in one condition than at, or in another, just as he may against every other influence or thing.

Without further discussion we may say that certain kinds of bacteria cause disease by invading against the provided defences, the bodies of animals or plants and by physiological activities peculiar to themselves disturb those of the invaded or parasitized hog. In some cases their detrimental influences are mainly mechanical. By multiplying and collecting in great numbers they form plugs in the blood vessels and impede the circulation. By similarly collecting in the air passages suffocation may follow. Others, like the bacilli of tuberculosis, and typhoid fever after gaining lodgement in the body, have a corrosive action by which the substance of the tissues is modified or destroyed, while still others give rise to chemical changes inimical to the health. It has been found in certain cases, without as well as within the living body, that organic compounds called *ptomaines* are formed (through the decomposing activities of special organisms), having physiological properties similar to those of the alkaloid poisons. There is surely nothing surprising in this. The alkaloid poisons like atropine and strychnine are products of plant physiology. Should we wonder that among the multitude of chemical changes set up by bacteria in organic bodies, some of these should result in poisons as deadly as those secreted by other plants. More recently it is announced that poisons are manufactured in the chem-

ical changes produced by the forces of the living body itself. To distinguish these the name *leucomaines* has been given them by Gautier, their discoverer. Here again there is to my mind nothing improbable or contradictory to former thought. Green plants develop poisons as organic compounds; why need we wonder that we ourselves having wonderful vital powers over chemical changes may in some conditions and circumstances also give rise to poisonous products?

What concerns us most is that the poisonous ptomaines may be produced in materials intended for human food, and thus make untold mischief and suffering. A case of this kind undoubtedly occurred in the dried beef poisoning reported to this society last year by Dr. Detmers.

Fourth. How may diseases due to bacteria be avoided? It is to the answer of this practical question that the great and chief interest in investigations upon the pathogenic bacteria is attached.

We can only glance at the possibilities within our reach, at the accomplishments achieved. In the first place, it must be recognized that a knowledge of the causes of a disease is a great step towards prevention or cure.

The enemy once found, his habits and methods discerned, conquest may be assured and victory easy. It is fully time that we accept the parasitic doctrine of disease, that we believe in the revelations of our microscopes, that we recognize in bacteria and their allies the sought for enemies and that we marshal our forces against them.

When those whose professional business it is to deal with disease unite upon this ground and together in solid agreement help in the struggle, we shall make rapid advances toward the victory prophesied.

When legislators and those in authority come to intelligently understand the duties devolved upon them from this same standpoint of bacteria and disease, we shall be better able as communities to baffle the invaders and spoilers. While individuals learn what to do and how to do it, the triumph must be near at hand. Families and communities must protect themselves against the injuries and disease from poisonous foods and drinks by attention to the preparations and preservation, and by the rigid exclusion of dangerous germs. In the manufactories intelligent supervision must be demanded, in the market faithful inspection and enforced

purity rigorously insisted upon, and in the water supply especially, freedom from contamination insured.

Against the inroads of the recognized contagious diseases we have offered quarantine regulations, the isolation of the diseased, and the consumption by fire of the disease-carrying products, together with the means now known of prophylactic vaccination or inoculation and of germicidal sanitation and medication.

[The author here gives in detail the history of cholera epidemics in Europe and this country and showed how by simply attending to the purification of the water supply many localities escaped infection.]

Leaving this suggestive history let us attend a wonderful story of accomplishments in quite another direction. The one name upon peoples' lips just now, not only in our own country, but throughout the civilized world, is that of Pasteur. Indeed, in one enthusiastic paper recently written, the author says that the nineteenth should be called the century of Pasteur. His culminating work, as we all know, is that upon hydrophobia, in which it is assumed that he has obtained a method of protective vaccination against this frightful malady.

According to the latest statistics at command, closing April 22d, 1,335 persons had been vaccinated according to the progressive treatment adopted by the renowned investigator, 13 from America. Each patient receives from ten to fourteen inoculations on as many successive days.

In a lecture by Dr. Grancher, Pasteur's medical adviser and colleague before mentioned, the persons bitten and vaccinated were arranged in three classes:

First. Those bitten by a dog of which the spinal cord was sent to Pasteur's laboratory, inoculated in rabbits, and caused death of the latter by hydrophobia; or those who had been bitten by a dog, the bite of which had caused death by hydrophobia in other animals or man.

Second. Those bitten by a dog which before or after death had been examined and declared rabid by a veterinarian.

Third. Those bitten by a mad dog which had escaped observation.

In the first group there were ninety-six patients of which one died. In the second 644 subjects and three deaths, a mortality for the two of 0.75 per cent.

It is asserted according to the best statistics 16 per cent. of those bitten by rabid animals die, a showing in favor of Pasteur's treatment not to pass unheeded. The third series, though still more favorable, is not discussed because little dependence can be placed upon the reality of the disease. The mortality among patients bitten on exposed surfaces (the face and hands) was in the first group; one in fifty-four or 1.8 per cent; in the second group three in four hundred cases, or 0.75 per cent.

M. Brouardel, in examining the statistics of the Council of Hygiene, of Paris, from 1862 to 1872, finds that in non-vaccinated persons bitten on exposed surfaces, the mortality is 80 per cent.

In addition, Pasteur has vaccinated 43 persons bitten by mad wolves; of these 7 have died, giving a mortality of 14 per cent. Brouardel has shown that non-vaccinated individuals similarly bitten present a mortality of 66.5 per cent.

If the efficacy of the rabic vaccine be compared with that of charbon vaccine and the Jennerian lymph, it is found that three agents have practically the same value. Before the introduction of the Jennerian vaccination, out of one thousand small-pox patients, five hundred died, while after its introduction but twenty-three out of one thousand vaccinated persons succumbed. The value of Jennerian vaccine is, therefore, 500:23 equals 21.7:1.

Similarly of *charbon*. Before the use of Pasteur's vaccine the mortality was 120 per 1,000, while at present out of 1,000 vaccinated animals but 5 die. The value of the *charbon* vaccine, is, therefore, 120:5 equals 24:1. In rabies, before the method of vaccination, the mortality was 160 per 1000, while after vaccination the deaths were 7 per 1000. The value of antirabic vaccine is, therefore, 160:7 equals 22.85:1. That is, those various vaccinations saved about twenty-two out of twenty-three patients who would otherwise hopelessly die of the specified diseases. Of course, it will be remembered that prophylactic vaccination against small-pox prevents a greater percentage of cases of disease.

The antirabic vaccination by Pasteur has been very differently commented upon. He has been denounced as an enthusiastic fanatic and extolled as the most eminent and beneficent genius of the century. When, however, we carefully examine the records of facts and assure ourselves of the painstaking fidelity with which they are compiled, when we ascertain to our satisfaction the sin-

cere and honest character of the renowned investigator, we cannot help but ascribe to him the profound gratitude of our hearts. When we remember the frightful character of hydrophobia as a disease, the hopelessness of treatment, the utter paralysis of medical skill in presence of the unknown agent of the affliction, and of the agonies of the sufferer, we cannot avoid, we would not avoid joining with hearty voices in the ringing plaudits of praise to the man who has robbed the disease of its terror, and who daily gives hope and joy to those who were otherwise doomed to die most miserably, or to suffer even worse tortures of mental distress and gloomy forebodings.

Pasteur has been most unjustly charged with keeping his method secret. Nothing can be further from the truth. He has fully published his processes, and has generously given instruction to several qualified surgeons, and magnanimously furnished them with his prepared materials. In gratitude for his achievements, the city of Paris has given him land, and donations are rapidly accumulating from all quarters for a large international hospital for his use, named the "Institution Pasteur." Pasteur hospitals are also in process of founding in Italy, Austria, Prussia, and America, each having already received the modified virus and methods of operation from Pasteur himself.

Washing out the bladder may seem a very simple feat to an intelligent physician and yet I have seen some of the most ludicrous attempts in this direction. For instance, a physician taking a rubber syringe capable of holding an ounce of liquid and syringing a woman's bladder with three or four syringefuls twice a week and expecting to cure a chronic cystitis in this manner. The proper way to wash a bladder is to do so thoroughly and this is to be done only by passing a considerable amount of fluid into the organ so as to not only reach every part but reach it with a sufficient amount of clean liquid. To accomplish this the double current catheter is to be used or else fill the bladder and then empty it thoroughly and repeat this washing comparatively frequently.

O-D

THE TREATMENT OF OPHTHALMIA NEONATORUM. By A. D. WILLIAMS, M.D., of St. Louis.

- Every physician, who attends women in confinement, is liable at any time to come in contact with this very dangerous disease and should be familiar with its proper treatment. Ophthalmia Neonatorum is the result of infection and is itself *very infectious*. Because a child's eyes are inoculated from the mother at the time of birth is evidence, but no *proof*, that she has gonorrhœa. Non-venereal vaginal secretions may excite ophthalmia neonatorum of violent character. The eyes of every child should be protected against inoculation as far as possible. But *extreme* caution in the direction is to be avoided as the very efforts to protect the eyes may cause the disease. The infectious secretions get into the eyes by running into them. To prevent this a soft *dry* cloth should be gently pressed upon the eyes and adjacent skin so as to dry off the secretions and thus prevent them from *running* into the eyes. If water is applied to the face, the secretions are rendered more fluid and are so much more likely to find their own way into the eyes. If the secretions dry up before the child opens its eyes, there is very little danger of infection. I might say almost none.

But when infection has taken place the disease manifests itself *nearly always* on the third day. The nurse or the mother will notice that the child's eyes look full or swollen, and that it does not open them as it should. When the eyes are pulled open a large amount of laudable pus gushes out. The quantity is often very surprising.

The diagnosis of course is easily made.

Occasionally only one eye is inoculated by the mother, but it soon goes to the other eye and will usually be manifested about the fifth day.

The danger to the eyes is very great from the very beginning of the disease. Some children become hopelessly blind within a few hours; others in two to ten days.

A very large number, say 20 to 30 per cent. of the permanently blind in every country result from ophthalmia neonatorum. This is the more deplorable because the disease can be uniformly cured when properly treated before the eyes are actually des-

troyed. My attention was recently called to this subject by examining a child that had been allowed to become hopelessly blind by carelessness and that too in the hands of a physician.

But what is the proper treatment? I give only the treatment I uniformly use in such cases. I may say just here that I have never yet lost a case of the kind where ulceration had not already taken place when the treatment was begun. When ulcers have already developed they at once begin to heal and whatever vision there is to begin with is permanently saved. I remember one slight exception to this latter statement. In one child diphtheria of the conjunctivæ had supervened with deep ulceration in both eyes when I first saw it. Both corneæ sloughed.

The proper treatment consists in first cleansing the eye thoroughly with dry rags; then both lids are completely everted and so held that they come together and completely cover the ball so as to prevent any of the medicine used on the lids from touching the cornea. Then the everted lids are brushed over with a solution of nitrate of silver (20 to 30 grs. to ounce of water) until the entire conjunctival surfaces are decidedly whitened by the caustic; then the whole is washed off freely and promptly by causing warm water to flow over the lids. This is done with the same brush used in applying the medicine. If strings of coagulated mucus and pus stick to the lids, they should be carefully and gently removed. Now the lids are allowed to turn down.

This treatment must be repeated once a day. The child will usually fall asleep at once and sleep quietly for hours, and will frequently open its eyes when it wakes up.

The strength of the solution may vary. If it is strong it must be washed off immediately while a weaker solution should be used more freely and allowed to remain longer before it is washed off. The caustic should cause decided whitening of the conjunctiva but no deep cauterization must be permitted.

A trained assistant should apply the medicine as it takes both hands of the physician to properly hold the lids of the child.

The most important thing is that *none* of the caustic must be allowed to come into contact with the cornea. These are desirable cases to treat, for they uniformly get well when the treatment is begun in time.

A CASE OF FATAL ASCITES RESULTING FROM DISEASED LIVER; Post-Mortem Examination. By H. C. FAIRBROTHER, M. D., of East Louis, Ills.

Mrs. G., æt. 58, a large and robust looking woman, the mother of a healthy family, never had any sickness except occasional pain and tenderness in the right side, and a few attacks of malarial fever. She has for the last ten years, experienced a gradually increasing enlargement of the abdominal cavity. This development increased to such an extent that, for the three years past she has had to be wheeled about the house in a chair, and helped to and from her bed. Although I was called a few times to prescribe for her during this period, she never placed herself fully in my hands, and always stoutly resisted the suggestion of surgical interference.

She died a few days ago and I was permitted to make a post-mortem examination, in which Drs. Jennings and Dwyer of this city, took a part. Upon making the anterior incision, adipose tissue, about six inches in thickness, was found covering the wall from the umbilicus to the pubes. When the peritoneal sac was penetrated about eight gallons of dark-colored, fetid, thick fluid issued from the cavity. This fluid was thickly strewn with a more or less solid substance, which, upon examination, was found to consist of exfoliations from the gangrenous peritoneum and adjacent tissues. The peritoneum was almost universally gangrenous, and so friable that upon the lightest touch portions would become detached and float away with the fluid. So, likewise, were the lower points of the lobes of the liver, the anterior aspect of the transverse colon, and those portions of the small intestine more immediately invested by the peritoneum. When the flaps of this enormous abdominal cavity were reflected the internal surface of the walls, and all the contained viscera presented but a wreck of mortification. But the most interesting pathological condition was found in the liver. So complete was the demoralization of this organ that it certainly could perform no function whatever, and the vital processes must have gone on for a very long time, perhaps for years, with very little assistance from this important organ. There was no portion of hepatic tissue proper. The entire organ was a mere parenchyma for old and new abscesses.

The lobes were corrugated and deformed entirely from their normal contour, and the internal structure was but cicatricial tissue. This condition of the liver was the best explanation of all the pathological conditions which followed. Her disease began with abscess of the liver, the ascites was the result of obstructed portal circulation, and death ensued from the gangrenous invasion which took place.

Why Atropine is so Valuable in Iritis.—Atropine meets three very important indications in iritis.

1. It dilates the pupil and prevents adhesions between the iris and the lens.

2. In dilating the pupil it presses the iris tissue into a smaller space and thus presses the blood out of it and in that way the atropine exerts an antiphlogistic effect.

3. It is a powerful anodyne and allays the severe pain resulting from the iritis. It would be difficult to find another single remedy that would meet so many important indications in any disease.

The Hypodermic Use in Bicyanide of mercury in the treatment of syphilis has met with great favor, not only on account of its great efficiency, but because there is little or no tendency to the formation of abscesses. One great inconvenience attending its use, is that it produces an intense local, burning sensation which is extremely painful and lasts for an hour or two. By combining cocaine muriate with it, I have found that this pain is either totally abolished or diminished to a great extent and thus it is much less disagreeable to the patient.

[Sept.,

Editorial Department.

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AN AMERICAN JOURNAL OF MORPHOLOGY.

"To fill a long felt want" is one of those trite phrases which by constant use and abuse have degenerated into sarcastic by-words, yet which are, nevertheless, the only combination of words in one language which exactly express an often needed sentiment. Such is the case in the present instance. Prof. C. O. Whitman, who for some years past has had charge of the Museum of Comparative Zoology at Cambridge Mass., and has ably edited a department in the *American Naturalist*, announces that he has made arrangements with the well-known firm of educational book publishers, Messrs Ginn & Co., of Boston and New York, to issue a journal devoted entirely to embryological, anatomical and histological subjects. As announced in the prospectus now before us "only original articles which deal thoroughly with the subject in hand will be admitted to its pages."

The journal will be issued in parts, each containing from one hundred to one hundred and fifty pages, and from five to ten double plates executed by the most competent lithographers in the country. It will appear but twice a year at first; the initial number appearing about the beginning of the new year. We

welcome this evidence of progress in purely American Scientific work and sincerely wish Prof. Whitman the success which his learning and talent so richly merit.

A HARMLESS BUGBEAR.

We have of late noticed editorial remarks in some of our esteemed cotemporaries which are, to a certain degree, ludicrous. The fact that the American Association of Physicians (limited) is to be formed of the (presumably) eminent medical men (of the East) and that the Mississippi Valley Medical Association wishes to gather in its ranks the active medical men of our great valley, seems to have inspired these editors with a fear, almost amounting to a panic, that if these associations prove successful the American Medical Association will suffer.

They express a certain amount of mental disquietude respecting the future safety of the "mother" association and imply in so many words, that the younger organizations are endeavoring to cause the destruction of the parent society. This unseemly terror, however, is entirely without foundation. One of these societies is so limited in number and requires such exalted powers in its members that it will never encroach upon the membership or power of any large body. The other is composed principally of members who always have and still intend to do all they can for the American Medical Association. They, however, have reaped the benefit which accrues from a body that is not quite so unwieldy and which is not so much interested in purely legislative proceedings. It is, furthermore, of the greatest advantage that the physicians of the great central basin of the North American Continent should commune with each other as all their professional interests are in the same district and the aspects of disease bear the same general stamp and the discussion of the various questions which arise have, so to speak, more of a local character. In consequence of this there is more practical interest, a closer affiliation is established and more practical, useful work is done.

No one need be afraid that the days of the American Medical Association are numbered or will be for many years to come. The old pioneers are being replaced by young and vigorous workers in the field of medicine and the *esprit de corps* has remained un-

shaken through the storms which have assailed the Association. It is the great legislative body and the great representative body of the profession of the United States and as such will continue to exist and flourish, and all may rest assured of one thing: The profession of the Mississippi Valley will continue to be loyal to the old Association in the future as it has been in the past.

When should the Ear be Syringed?—The indiscriminate syringing of the ear is very reprehensible. How often we hear patients say: "I saw Dr. Blank and he told me to syringe the ear." There should always be a definite object in view in syringing the ear or ordering it done. The only legitimate purpose there can be in syringing the ear is to wash something out of it. The ear therefore should only be syringed when there is something in it to wash out.

When this idea is fully understood indiscriminate syringing of the ear will cease. It is the duty of every physician to look into the ear and *see* if it needs syringing before he does it or orders it done.

Every act should have an object in view; the only possible object there can be in syringing the ear is to get something out of it.

W

Department of Microscopy.

CONDUCTED BY

FRANK L. JAMES, Ph. D., M. D., President of the St. Louis Society
of Microscopists, of St. Louis.

American Society of Microscopists—The Chautauqua Meeting.

If the objects of the annual meetings of the American Society of Microscopists were simply to get together once every year to listen to set papers read by the members and to discuss these papers in an offhand way, then the meeting which closed at Chautauqua on the 14th of August was a success. If, on the contrary, the objects are as stated in the preamble and resolutions adopted by the little band who met at Indianapolis in 1878 and founded the Society, and in which the social and scientific features of an annual gathering were skillfully blended, then the late meeting was as unsatisfactory as could well have been. While it is admitted on all sides that more actual work was done at Chautauqua than has ever been accomplished in a similar length of time at any previous meeting, there was an entire absence of those social features which have hitherto distinguished the assemblages; and hence the great majority of those who were present came away feeling that the choice of Chautauqua as a point of reunion was a great mistake, and the meeting of 1886 a great failure. With this verdict I am inclined to concur most heartily. It is useless however, to discuss the causes and reasons which contributed to this failure. They are sufficiently patent to everyone who was there and will furnish a valuable example and precedent for all time to come, thus enabling us to avoid similar errors in the future.

The attendance was by no means large, though larger than would have been the case if many who went had known prior to going thither as much about Chautauqua as they afterwards

learned. When the question as to room and hotel accommodations was put to the authorities of the officers of the Chautauqua Assembly, months before the meeting, we were answered that there could be no possible doubt upon that score, as they were prepared to accommodate all who would come. The actual fact is that only two or three of the sixty or seventy members who attended could secure hotel accommodations, the balance being sent out to scuffle for rooms and board in the cottages, themselves overcrowded. The two or three fortunate ones were those who, like the writer, took no stock in general promises, and secured rooms a month in advance of the meeting.

The Working Session.—The afternoon devoted to the exemplification of methods in microscopical technology, was perhaps the most complete success of the meeting. Almost every one who had promised his help was on hand and every table was surrounded by groups of members eager to learn the latest and best ways of doing good work. Many of these methods have been described in former years, but others were quite new to those who were present. Some of these latter are noticed further on. Great credit is due to Mr. Griffith, the founder of this feature of the annual meetings, for the thorough manner in which he carried out the original idea. He has been requested by an unanimous vote of the Society to continue at the head of the department, and though he has frequently declared that he meant to retire after the Chautauqua meeting, I am in hopes that he will reconsider his determination. There is no one in the Society that could fill the place half so acceptably.

Thin Sections.—Dr. Reeves, of Wheeling, W. Va., exhibited a box of mounts of various histological and pathological specimens that for thinness and uniformity of section have never been surpassed and rarely equalled. Not only this, but the sections, many of them of large area, were arranged on the slides absolutely without a fold or a wrinkle. During the working session the doctor exhibited his methods of securing these almost marvelous results, and as in almost everything of any value in technology, the success was due to *fidelity in detail*—the manipulations themselves being simple and only such as are performed (in an imperfect way) by all of us in making mounts. This detail extended to every preparatory operation from hardening to embedding. In the next number of the JOURNAL we will present Dr. Reeve's views and methods in his own language, but at present must con-

fine ourselves to an outline of his work as exhibited in the working sessions.. For hardening the doctor uses nothing but alcohol, applying it exactly as hitherto suggested by the writer in *Microscopical Technology* (Cap. III), viz: commencing with dilute alcohol and gradually increasing the strength of the agent until 95° alcohol is used. He insists upon a point to which I have also called attention, viz: that the best and most thorough and uniform hardening is obtained when the material is cut up in comparatively small pieces. A pathological specimen three quarters of an inch cube may be thoroughly hardened in forty-eight hours, while one double that dimension would require a week to attain a similar degree of induration. For embedding Dr. Reeves uses paraffin. This is heated in a waterbath to a point barely sufficient to render it fluid and the object to be cut is soaked in the material until it is thoroughly impregnated with it. This is a most important point, and is one of the prime factors in his great success. He is not content, as most of us are, to let the object lie in the embedder a few minutes, but sometimes keeps it soaking for several hours.

He uses one of Bausch & Lomb's No. 2 machine microtomes, the knife of which is provided with a simple little device made of bent wire for keeping the sections from curling up on the blade. This device cannot be explained without a cut and hence we leave it to be illustrated with the doctor's paper.

The Butter and Fat Committee, consisting of Dr. Detmers, Dr. Fell, Mr. Vorce and Mr. Atwood, and which was appointed at the Cleveland meeting to report upon the value of the method proposed by Dr. Tom Taylor, microscopist of the Agricultural Department, for distinguishing pure butter from its adulterations and imitations, after a year of careful study and experiment, reported that the said method is a valuable one, but is not to be relied upon under all circumstances and to the exclusion of other tests. While this report is not the thing hoped for by Dr. Taylor and his friends, it is accepted as being the honest expression of men altogether competent to investigate the matter, and is to a certain extent in accord with Dr. Taylor's own later investigations and statements. The question is one of pressing and far-reaching importance and one which cannot be allowed to rest where it now stands. Recent national legislation, imposing heavy fines and penalties upon the manufactures and seller of oleomargarine and

other imitations and adulterations of butter, renders it absolutely necessary that some exact and certain method of identification and differentiation be devised whereby true butter may be distinguished under any and all circumstances. Prof. Weber's paper, read at the Chautauqua meeting makes no suggestion in this direction. It was devoted entirely to negating, or at least throwing discredit upon Dr. Taylor's method. As usual in all such cases, I think that he goes as much too far in his negative positions as Dr. Taylor has gone in the other direction. No one who has followed Dr. Taylor's investigations can doubt that he has made an important advance in the right direction, though as stated by the committee, his test in its present condition is not one to be relied upon implicitly and to the exclusion of chemical and other methods. It is to be regretted that the Society did not appoint a committee to continue the investigation.

The Soiree.—The annual soirée of the Society which is usually the most brilliant feature of the meeting, was held on Thursday evening, August, 12th, and while it was a success the fact is due to the inherent value of the exhibition made by the Society, and not to any extraneous influences or aid whatever, on the part of the Chautauqua people. It was held in a barn-like building called the Rink or Gymnasium, situated on the extreme edge of the Assembly grounds and entirely too small for such an occasion. About one hundred microscopes were in position and the class of exhibits were in the main very fine. The admission to the soirée has hitherto been entirely by invitation and in every city in which the Society has hitherto met, these cards have been most eagerly sought after. The Chautauqua people, had, up to Thursday, displayed so little interest in our work that the Executive Committee concluded that it would not be necessary to limit the attendance by issuing cards, and instead of so doing, let the fact be announced in the Assembly that all who desired to come were entirely welcome. Long before the hour of opening, the doors of the building were besieged by an immense throng, only a small portion of whom could be admitted at one time. The exhibition was limited to one hour and a half or from 8 to 9½ P. M., and though a constant stream of people, three and four deep passed through into the hall by one entrance and out by another, when the time for closing arrived not half of the people had had an opportunity of entering. The exhibitors were requested to

continue the show but as most of them had been steadily at work from 2 o'clock P. M., in the working session, they were tired out and quit most promptly at the hour agreed upon.

A most Indecent and Outrageous Violation of the proprieties of life was made by one of the exhibitors during the evening, and I should be derelict to every sentiment of true science did I fail to record it and to protest against the possible chance of a repetition of the occurrence by allowing the perpetrator to remain a member of a Society, composed of gentlemen and ladies. When a certain Doctor was asked by the secretary for a list of the objects which he proposed to exhibit, among other things he announced that he would show *the germs of life*. It was so printed in the programmes and no one thought for a moment that the exhibitor intended to display anything other than some of the lowest forms of animal or vegetable existence. Judge of the surprise and disgust of the balance of the Society at learning that he was engaged during the entire evening in displaying in a mixed assemblage of non-professional men and women, and even children, *living human spermatozoa*. I am glad to state that the Executive Committee promptly took cognizance of the matter and directed the Secretary of the Society to convey in writing to the offending member their unqualified disapproval of his action. The Secretary was directed to make the letter a severe reprimand. Expulsion would have been much better, but as this would have necessitated open discussion of the subject, it was deemed best to act as above detailed.

The Officers for the ensuing year.—Prof. Rogers of Harvard was chosen President, and Dr. Reeves, of W. Va., and Dr. Blackham, of Dunkirk, Vice-Presidents. The Secretary, (Prof. Kellicott,) and Treasurer (Dr. Fell,) hold over another year. The next place of meeting is not yet definitely settled, but it is generally thought that Indianapolis will be chosen. This is as it should be, the Society was born in that City, and it is only proper that its tenth anniversary should be held there.

ELEMENTARY MICROSCOPICAL TECHNOLOGY.

XII. MOUNTING MEDIA.

The series of operations preliminary to the final act of mounting have now been completed. They have thus far progressed in separate but parallel lines, the one having to do with the preparation of the object to be mounted, and the other with making ready the glass slip which is to receive it. We have now arrived at a point where the manipulations will be with both, for nothing now remains but to place the object within the cell-wall, arrange it as we wish to have it remain, surround it with the proper preserving medium, adjust the cover-glass and cement it to its proper place and our task is completed—we have a finished slide. But in this series of manipulations, simple as they seem, are embraced some of the most difficult and important points in microscopical technique. Our slide being ringed and clean, and our object ready the first question that demands our attention is the choice of a mounting medium.

§ LXIV. MOUNTING MEDIA. By this technical term we designate the fluids or materials with which the objects are surrounded and permeated and the cell filled. This medium has a two-fold function, viz: preservative and optical. The first is self explanatory and the second has already been explained in a previous chapter (Chapter II § 6) to which we must now make reference.

§ LXV. Like cements, mounting media may be broadly divided into two classes, viz: the resinous and the aqueous. The first embraces Canada balsam, gum-damar, liquid-ambar, the drying oils, etc.; the second, glycerin, gelatin, camphor water, glycerin jelly, etc. The choice of a medium will depend in most instances upon the nature of the object to be mounted and the character of the investigation to be made. These problems belong to special technology and hence need not be discussed here except in a general way. Leaving out those cases where optical problems must be worked out (as, for instance, where a medium of a certain definite refractive index is required), or those cases where certain peculiar preservative properties are demanded, the choice of a medium is practically limited to two or three substances,

viz: Canada balsam, glycerin or gum-damar, and the student will rarely go wrong when he chooses one of these media. They are commonly, I might say almost universally, used among microscopists for histological and pathological investigation.

The methods of preparing and using the balsam and damar are essentially the same, while the manipulation of glycerin may stand as a type of mounting with aqueous media.

(a). CANADA BALSAM.—This is the oldest and best known of all the mounting media, having been used for this purpose from an early period in the history of the science. At first it was used in its crude state,—that of a semi-fluid terebinthinous resin, the exudation of a tree belonging to the family of firs (*Abies balsamea*) and the mounts thus made, owing to the large proportion of oil of turpentine and other fluids contained in the resin, took a very long time to set and harden. For many months after preparation the slightest touch would cause a displacement of the mount. This defect is remedied by driving off the turpentine and other volatile matters by exposing the crude balsam to prolonged heating in the water-bath, a process which converts it into a solid, brittle resinous mass closely resembling ordinary fine resin or colophony. This mass, dissolved in chloroform or benzol to a proper consistency, constitutes the “balsam” now almost universally used by microscopists. It may be purchased ready prepared from the dealers in microscopical supplies.

(b). GUM-DAMAR.—This gum in its crude commercial state consists of hard, transparent, brittle nodules varying in size from that of a pea up to a hickory nut. It is also an exudation from a tree belonging to the fir family, and known as the damar or damara pine. It is prepared for use by dissolving in chloroform or benzol. As the crude gum always contains more or less dirt, fragments of bark, etc., the solution must be clarified for use. The larger particles of foreign matter may be removed by running the solution through absorbent cotton. To get rid of the finer dust is a more difficult matter. A number of plans for clarifying it have been suggested but about the best and most convenient (though not the cheapest) is to make the solution so thin that it will pass through filter-paper. This makes it perfectly limpid, and the surplus benzol or chloroform may be afterwards driven off by heat. Damar by itself soon becomes very brittle and somewhat opaque: these faults are remedied by adding to the

solution prior to filtration a few drops of nut, poppy or linseed oil.

A perfectly limpid and colorless solution of damar, of high refractive power and great beauty may be made as follows: To the clarified solution in benzol add alcohol of 90° until a precipitate is no longer formed. Remove the precipitated gum and wash with distilled water and afterward with alcohol; let dry thoroughly, and redissolve in pure benzol. This resin when dry is exceedingly brittle, falling into an impalpable white powder upon the slightest pressure. The addition of 20 drops of poppy or nut oil while imparting a very faint yellowish tinge corrects the brittleness. Mounts made with this medium never become discolored or opaque—or at least some that I have kept for four years and have constantly exposed to the light still remain absolutely colorless and transparent, while balsam mounts made at the same time and submitted to the same influences are quite yellow. If the student has facilities for so doing it will repay him to recover the excess of benzol, chloroform, alcohol, etc., used in making these preparations, by the usual processes of distillation at low temperature.

(c). LIQUID-AMBAR, styrax, or 'sweet gum' is another resin of high refractive power and though somewhat high colored, is valuable as a mounting medium. It is prepared and used like Canada balsam. It has been found especially valuable as a medium for mounting diatoms.

(d). MASTIC.—This is a resinous exudation from a shrubby plant of the pine family, the well-known *pistacia lentiscus* of the Grecian Archipelago. It is freely soluble in chloroform, ether, benzol and turpentine. Alcohol dissolves about four-fifths of it, leaving a friable, brittle mass called masticin. Although apparently well-fitted for a mounting medium mastic is but little used for this purpose. Some mounts made with it 4 years ago are now in excellent condition. Its refractive index is about the same as that of Canada balsam.

(e). COLOPHONY, or common pine resin, is another substance that is apparently well fitted for use as a mounting medium, and which is scarcely ever used,—probably because it is so plentiful and common. Thiersch and Frei are both loud in their praises of this material, the former preferring it to Canada balsam. To prepare for use pick out a lump of the clearest virgin resin and dis-

solve it in sulphuric ether, filter and heat the filtrate in a water-bath until the ether and the originally contained oil of turpentine are driven off, and the residual resin when cold breaks with a clean, conchoidal fracture. This should be redissolved in absolute alcohol, and the solution used in the same manner as Canada balsam.

This completes the resinous media commonly in use. The method of applying them will be explained further on.

§ LXVI AQUEOUS MEDIA.—Under this term I include all media that are soluble to any extent in water, or which readily mingle with the same and give clear resultant fluids. A very large number of such media have been suggested from time to time, but we need now consider only those which have been found to answer all general purposes in histological and pathological work. My own experience with the great mass of the suggested materials has convinced me that except in certain rare cases all except those that I mention below can be dispensed with without any serious inconvenience.

(a). GLYCERIN.—This fluid comes at the very head of the list of those media which may be used under almost all circumstances. When pure it is a colorless, odorless fluid, of a syrupy consistence, oily to the touch, and very hygroscopic.—absorbing water with great avidity from everything with which it comes in contact and which contains that fluid. It is neutral in its reactions, soluble in water and alcohol in all proportions, but insoluble in ether, chloroform, turpentine, or benzol, or the fixed oils. Its specific gravity is 1.255, and its refractive index 1.475. Its high refractive powers, its affinity for water, its preservative properties, and its stability combine to make it the most valuable of all the media for mounting animal and vegetable tissues containing water. As remarked by Frei, "what balsam is to dry tissues, glycerine is to moist ones." Possessing antiseptic properties of no mean order, it may be used alone or its preservative properties may be reinforced with carbolic, acetic or formic acid. Since pure glycerin renders some delicate tissues too transparent for accurate examination, it sometimes becomes necessary to reduce this property by the addition of distilled water or alcohol. No definite rule can be given for this dilution, but since it is advisable that those objects destined to be mounted in it should remain in glycerin for several days before they are finally transferred to the slide,

the student may easily satisfy himself on this score before finally finishing the mount. Where only a slight amount of dilution is necessary the operator may safely use the pure glycerin, relying on sufficient water entering the cell beneath the coverglass in the act of washing the unfinished cell.

Dr. Beale recommends that a small amount of acetic acid be always added to the glycerin, especially in mounting objects that have been injected with his blue or carmine fluids. Frei suggests hydrochloric acid, and Ranvier formic acid for this purpose. One part of acid to 100 of glycerin is abundant in any case, and where hydrochloric acid is used the proportion should not be over one part to 500, or even weaker. For objects not injected or stained Professor Bastian strongly recommends six parts of crystalized carbolic acid to 100 of glycerin.

(b). GLYCERIN JELLY.—Soak a good article of gelatin in cold water until it has taken up as much of the fluid as it will absorb. Throw on a coarse cloth or sieve and drain off all superfluous water. Transfer to a water bath and heat until the gelatin melts into a homogeneous fluid. To this add an equal volume of pure glycerin, and continue the heat until the water bath boils. Strain the mixture through a clean piece of white canton flannel and preserve for future use. This jelly will keep indefinitely and when required for use needs only to be fluidified by immersing the container in moderately warm water. It is to be used in the same class of materials as pure glycerin.

(c). CAMPHOR WATER is made by placing a lump of camphor in distilled water and letting it remain until the fluid has a strong camphoric odor and taste. Though much praised by some (especially English) workers I have rarely found any use for this medium. Creasote water, used for the same purposes as camphor water, is made by dissolving three parts of creasote in a fluid consisting of three parts of alcohol and 94 parts of distilled water.

Methylated spirits, alcohol and glycerin, alcohol and carbolic acid, glycerin and honey, serum, and a thousand other mixtures and simples have been suggested as media possessing real or fancied advantages for general or special mounting purposes. An experience of nearly twenty years has taught me, however, that balsam, damar and glycerin (alone or in its combinations as above) are practically sufficient for all emergencies in mounting, except of course where a medium of exceptionally high refractive index

is required in some special investigation,—such, for instance, as Prof. Hamilton Smith's high index media for mounting the diatomaceæ. These special media will be given in another part of this work.

Department of Dermatology and Syphilology.

CONDUCTED BY

A. H. OHMANN-DUMESNIL, A. M., M. D., of St. Louis.

Mollusum Contagiosum.—Dr. Charles W. Allen in a paper on this disease, in the *Journal of Cutaneous and Venereal Diseases*, makes an analysis of fifty cases; forty-two of these were in one institution and they seemed all to have taken their origin from one. They were distributed as follows: Eyelids and region of the eye, 51; nose, 11; lips, 11; hand, 4; chest, back, arm, knee, leg, each 1. He removed 133 tumors of which he kept record, and a few smaller ones. The growths were removed for the most part with a sharp spoon or dermal curette. In twelve of the cases new crops appeared and five children, not previously affected, showed the disease some three months after the first were operated upon. The author believes mollusum to be contagious, giving the following as his reasons:

1. The cases reported by Bateman, Mackenzie, F. Fox, Liveing and others, and a case he mentions where the child first had the disease, and the mother afterward, upon the face, neck, or breast which is difficult of explanation by any other theory.

2. The spread of the disease in families, schools and institutions. Liveing (*Lancet* Oct. 5, 1878) reported nine cases occurring coincidently in a school.

3. The facts that the parts exposed to contact are those almost solely affected. The face in children, the breasts of mothers, and the genital region in adults, and especially in prostitutes and the men who visit them.

4. The reported successful inoculations.

5. That negative evidence has no weight and it is not always possible to inoculate other diseases which are well known to be contagious.

Although this seems to be a good plea for the contagious nature of the disease, it is not conclusive. There is so little positive evidence, on the one hand; and the failure of attempts to establish it by others, on the other hand, together with the opinion of good authority that the question remains still *sub judice*.

Absorption of Fatty Substances.—The absorption of fatty substances is a question of the highest importance in the treatment of skin diseases, especially when it is desired to produce a certain effect upon the deeper layers. A number of experimental researches have been undertaken lately to determine this problem of absorbability. P. G. Unna, of Hamburg, has demonstrated that the more water a fatty substance is capable of absorbing the more rapidly it is itself absorbed by the skin and he has published the following table giving the amount of water absorbed by different fatty bodies and mixtures:

100 parts of vaseline will absorb	4 parts of water.
" " hog's lard "	15 " " "
70 " " cod liver oil }	
30 " " white wax }	32 " " "
70 " " linseed oil }	
30 " " white wax }	48 " " "
70 " " oleic acid }	
30 " " white wax }	60 " " "
100 " " lanolin "	105 " " "

The Bacillus of Leprosy.—Leprosy, its pathology, its inoculability, its treatment and hygiene, have of late been attracting quite an amount of attention. We see the question of its being inoculable discussed in France, Australia and America; whilst its pathology, more particularly in reference to a bacillus as its cause, has been the subject of a great deal of controversy in the medical world. Dr. Edward Arning, of Honolulu, in his report to the Board of Health of Hawaii (*Boston Medical and Surgical Journal*) gives the following as his conclusions in regard to the bacillus:

1. The bacillus lepræ is a parasite limited to the human race.
2. It must be transmitted either directly from individual to individual, or
3. Run through an intermediate stage, which may be present

in soil, water or food. into which it only passes from the diseased tissue of a leper.

4. Accepting either theory, the direct or indirect transmission, we must look upon every individual leper, whether in the incipient or advanced stage, as a dangerous focus of the malady.

5. The leprous germ requires a certain disposition of the human soil for its propagation. Such a disposition may exist concurrently with apparent good health.

Parasiticism in Dermatology.—Dr. Geo. H. Rohé read a paper on this subject before the Clinical Society of Maryland (*Medical and Surgical Reporter*) not long since. He concluded that the diseases which have been proven to be of parasitic origin are favus, ringworm, chloasma (*tinea versicolor*), erysipelas, leprosy and glanders. Other diseases that are sometimes considered as due to parasites, but in which the etiological relations of the parasitic fungi or bacteria must be regarded as unproven, are, furuncles, carbuncles, impetigo contagiosa, rhinoscleroma, pityriasis capitis, alopecia areata, psoriasis, lichen ruber, mal de los pintos, mycetoma, lupus and verrugas. In looking over this list I cannot accept as proven that leprosy is undoubtedly due to the bacillus that has been found, inoculation not having met with that degree of success which is necessary to establish so important a point. In the latter molluscum contagiosum could be included without straining a point whilst *mycosis fungoide* has been pretty well established as a parasitic disease due to the presence of a streptococcus. We have moreover, a disease which manifests itself upon the skin—syphilis, which is claimed by Lustgarten and his adherents to be due to a bacterium. As I remarked a few years ago there seemed to be a general tendency to attribute the causation of diseases, whose pathology and etiology is somewhat obscure, to the presence of micro-organisms. The only method to solve such moot questions is to cultivate the organisms and establish the fact, if it be so, by a series of successful inoculations. No better demonstration can be required and anything short of this will always lack some of the essential factors of a convincing conclusion.

The Nature of the Chancroid.—Henry C. Sims reviews the question as to whether the chancroid is due to a specific virus or not in the *Polyclinic* and, as the result

of his observation and experience, concludes that it is not. His principal arguments are as follows: In specific diseases we find that there is a period of incubation which has a certain regularity for each disease and which is pretty constant. In chancroid this does not exist and it would be as correct to look upon the time intervening between the introduction of any foreign body under the skin and the subsequent inflammatory action, as a period of incubation as to consider the time between the exposure and the development of the chancroid as also a period of incubation. There is another law which is almost absolute, which is that, in specific diseases, one attack procures immunity from subsequent ones, notwithstanding a new exposure to contagion. In the chancroid there is no limit to the number of attacks. If the chancroid is due to a special virus, nothing but that special virus should be capable of producing it and yet it is conceded that the pus from a non-specific sore will produce a lesion resembling in every particular a chancroid.

The microscopic appearance of the chancroid is that of a common inflammation resulting in ulceration. The nature of the adenitis which accompanies the chancroid is also inflammatory and the bubo is a complication which is not common and of the buboes which go to suppuration very few give any evidence of a virulent nature. As a final argument it is stated, and I can confirm this from my own personal observation, that no specific treatment is necessary to produce a favorable termination. The same means employed in other ulcerations, following the indications presented by the appearance of the lesion, will be found to be all-sufficient.

Gummata of the Penis.—Gummata of the penis, despite what has been written upon them, still appear to be to a certain degree a *terra incognita* to a large number of practitioners. The importance of recognizing them lies in the fact that they may be easily mistaken for chancres if a thorough examination is not made. D. Brégéat has made a special study of this subject (*Paris Médical*) and the following is a short summary of his observations as given in a recent inaugural dissertation. Gummata of the penis are small tumors, primarily solid and seated in the mucous membrane or under it or in the subcutaneous connective tissue. They form a sort of nodes or circumscribed indurated nuclei, very similar to the circumscribed induration of the infecting chancre or

to dry plaques of induration, according as they are found in different regions of the penis. Later on these tumors soften and ulcerate; it is particularly in the ulcerative stage that these gummata simulate other venereal or cancerous affections with which it is an easy matter to confound them, unless the objective characteristics be minutely examined. After a time, reparative changes take place. The author has divided these gummata into four classes: 1. Those of the sheath and prepuce; 2. Those of the glans; 3. Those of the urethra; and, 4. Those of the corpora cavernosa. It takes from six to eight months to run through the different stages, although sometimes the period is much shorter especially if influenced by treatment.

Gonorrhœa contracted from Rectal Coition.—Dr. Randolph Winslow gives a Report of an Epidemic of Gonorrhœa contracted from Rectal Coition in a late number of the *Medical News*. The cases, ten in number, occurred in an institution near Baltimore, where a large number of boys of ages from nine to twenty-one years are collected. The epidemic is supposed to have originated in the following manner. A boy on leave of absence, contracted gonorrhœa from a girl and on his return cohabited with a boy, causing an inflammation of his rectum. This boy cohabited with a third who in a few days had gonorrhœa. Case occurred after case, with no assignable cause apparently, but some of the boys confessed to buggery and attributed the disease to it. Such cases are unusual, but it will be found, if a minute inquiry is made, that where males are in confinement and have access to each other pederasty is comparatively common and venereal diseases will be transmitted. A few years ago I saw several cases of chancre and gonorrhœa of the rectum in convicts at the Missouri State penitentiary, contracted in this manner. The cause was due to the necessity of placing two prisoners in each cell.

The Kentucky School of Medicine has secured new and commodious quarters in Louisville, having been forced to this move by the fire which destroyed its entire premises and outfit on June 10th last.

SHORT TALKS ON DERMATOLOGY.

Under the above Caption the Editor of this Department proposes, in each number of the JOURNAL, to give a short practical synopsis of the principal points attaching to the diagnosis and treatment of some skin disease. No attempt will be made to follow any classification, but diseases will be taken up as they suggest themselves.

XI. SEBORRHOEA.

Seborrhœa is one of the common diseases of the skin which, although easily recognized at times, is at other times difficult to differentiate from some other dermal affections. It is a functional disease of the sebaceous glands and may exist upon any portion of the body with the exception of the palms of the hands and soles of the feet. As a rule, it is found most frequently upon the scalp and is known by the common term "dandruff," in this locality. It is also frequently found in the face, more especially on the sides of the nose and on the chin, and in the eyebrows occasionally. A portion of the face not infrequently involved is at the root of the nose between the eyebrows.

Two principal varieties of this disease are recognized, the dry (seborrhœa sicca) and the oily (seborrhœa oleosa). The former is the more common of the two and occurs most frequently upon the scalp in which locality it is ordinarily denominated "dandruff." It may occur upon the face, shoulders, etc. as mentioned above. It presents the appearance of thin, yellowish or greyish scales rather branny in appearance and separating easily. If a number be taken up between the finger and thumb they will, upon friction, impart a greasy feel. They are rather thin except when allowed to accumulate. In this case they will form dirty yellowish, greasy looking masses varying in extent from a split pea to a quarter dollar or more, and when occurring upon the face will present a rather unsightly appearance. Upon the scalp, more particularly and in other localities, it will be observed that when these scales are removed the skin appears rather pale than normal, despite the fact that, sometimes, the edge of this sebaceous accumulation may be surrounded by a zone having a higher color than the adjacent skin. Where the integument has been irritated, such as by scratching, of course, the color may be heightened temporarily. When hairy parts are involved by this form of seborrhœa there is generally more or less itching which accompanies

it and it may be so intense as to be distressing. It is also in the same localities that the greatest amount of sebaceous matter will collect and produce its results.

Seborrhœa oleosa as its name indicates is the oily form of this disease. It is most frequently observed in summer in our latitudes and generally in persons who have dark complexions. In tropical countries it is much more frequent than the dry form. It is observed upon the face which presents, in certain parts such as the region about the *alæ nasi*, a shiny glistening appearance and the presence of the liquid sebaceous matter looking as if oil had been poured upon it. In addition there is a strong, unpleasant odor due to the decomposition of a portion of the fat. This is more particularly the case when the umbilicus or genitalia is the seat of the disease.

Seborrhœa may be either local or universal. As a rule, it is localized. When universal it is congenital and fatal. What might be termed universal seborrhœa is the normal coating of the new-born child with the *vernix caseosa*. It is, however, to be distinguished from the disease in which case the skin is stretched, the eyes and lips fixed and the fingers, toes and auricles undeveloped to a great extent.

This disease is essentially a functional affection of the sebaceous glands, which is very chronic in character, lasting for years. It occurs at or after puberty and is frequently to be seen in middle life and at the period of decline. It is somewhat more frequent in females at the age of puberty and is often associated with acne, comedo and eczema.

The causes of seborrhœa are varied. As a general rule, there is to be found some general disturbance in the patient which seems to act upon the system in such a manner as to influence the nerves controlling the sebaceous glands. Anæmia, chlorosis and particularly uterine diseases have been recognized as causes of seborrhœa. It is also observed that seborrhœa occurs in conjunction with or follows the exanthemata, severe fevers, and such systemic disorders as syphilis, tuberculosis, etc. There is a class of cases, however, in which no known cause can be found and these are generally easily relieved by external applications.

Seborrhœa may be mistaken for eczema, psoriasis, *tinea tonsurans*, or lupus erythematosus. Its history will be found altogether different as well as the objective symptoms which exist and a close examination is alone sufficient to make a differential

diagnosis. The diseases for which it might be taken will be considered in these "short talks" in the near future; salient points of difference can then be seen by comparing the objective appearances of these disorders of the skin.

The treatment of seborrhœa should be both constitutional and local, in the majority of cases. Hygiene and nourishment should be as good as possible. Abundance of good air, good water and good food should be provided and in those cases marked by anæmia or debility cod-oil and iron tonics will be of value. If the causes, upon which the affection depends, can be determined the treatment should be directed to them. A valuable remedy is sulphur and its compounds and more especially the sulphide of calcium in small doses (gr. $\frac{1}{8}$ - $\frac{1}{4}$) three or four times daily and continued for a long time. In young women it is necessary to insist upon a proper amount of exercise, and also to see that the bowels perform their functions properly and regularly.

The local treatment is of considerable importance, and, frequently, is the only one necessary. The prime objects to be accomplished are to remove the accumulation of sebum and to stimulate the sebaceous glands. The *modus operandi* differs a little according to whether the locality to be treated is hairy or not. If the trouble occurs upon the scalp, for instance, the scales or accumulation of sebaceous matter may be removed by washing with soap and water. If there be a large quantity it will become necessary to apply some bland oil and let it soak during the night. The next morning the following mixture should be thoroughly rubbed in:

R Saponis Viridis.....℥vii
Alcoholis.....℥iv
Solve et filtra.

Sig. To be used as a soap wash or shampoo. (Hebra.)

Take about a half ounce of this with water and shampoo the scalp well with it. Dry the hair well and, if the scalp appears irritated, apply some bland oil or ointment. Generally, however, further stimulation will be necessary and a lotion containing carbolic acid, cantharides, tincture of capsicum, bi-chloride of mercury or some similar substance may be applied. Ointments will generally have a better effect and one of the best applications to make in such cases is one containing precipitated sulphur, in the

strength of a half-drachm to two drachms to the ounce. The ammoniated mercury, red oxide of mercury, oleate of mercury, beta naphthol, etc., may also be used with benefit. The frequency of the applications is to be governed by the activity of the process. The time during which the treatment is to be pursued will generally last weeks if not months and should be persisted in until improvement takes place.

The local treatment of the non-hairy portions is essentially the same, with this exception perhaps that the irritating applications should not be quite as strong as for the scalp. Sulphur is about the best remedy for this variety, in strength of from fifteen grains to one drachm of ointment. By combining a little oleate of mercury with it, the effect is often enhanced.

The prognosis in the affection will depend upon the general state of the patient and the ability to remove the cause. Seborrhœa is an obstinate complaint and is most serious when it occurs upon the scalp as it occasions a loss of hair which is generally permanent. When universal it is generally fatal and the child dies very early.

At the last Congress of Russian Physicians which met at St. Petersburg, a Russian Ophthalmological Society was formed. Its meeting will probably be held next December.

Proceedings of the American Rhinological Association. The secretary of this Association informs us that he has a few copies of the proceedings on hand for sale; price \$1.00.

The American Dermatological Association held its Tenth Annual Meeting at the Indian Harbor Hotel, Greenwich, Conn., August 25, 26 and 27th. Dr. Edward Wigglesworth, the President, made an address and, besides this, twenty papers were read according to programme and also a number of volunteer papers.

[Sept.,

Department of Diseases of the Eye and Ear.

CONDUCTED BY

A. D. WILLIAMS, M. D., of St. Louis.

Double Vision in Convergence with Crossed Images.—

I recently operated on a young man for a very high degree of convergent strabismus. After the operation, the eyes still converged to about half the original extent. As is always the case when the eyes do not come exactly straight, double vision followed the operation.

The very singular feature in the double vision was that, though the eyes converged decidedly, the images were crossed; the image in the left eye was on the right, and that of the right eye was on the left. Reasoning physiologically, the images should have been homogeneous, not crossed. However, in my experience, I have met with several similar cases.

Divergent Strabismus with Homogeneous Images.—

Dr. Geo. A. Berry, of Edinburg, (in *Augenheilkunde* for June,) reports a case of divergent strabismus with *homonymous* images. In this case the condition is exactly the reverse of the above case. There the images should have been *crossed*, speaking in a physiological sense.

The physiological law is that in diplopia from convergence the images are homonymous, while in divergence they are crossed. In both of the above cases this law is reversed.

Incongruence of the Retinæ a Frequent Cause of Strabismus.—The only theory which will satisfactorily explain the unphysiological behavior of the images in the above two cases, is incongruence or non-identity of the retinæ. Parts of the retinæ, which physiologically ought to correspond, do not correspond and consequently are not identical. Hence all such persons see double from birth. This double vision is so confusing that it cannot

long be tolerated. In order to get rid of the double vision, nature very soon causes one or the other eye to turn far outwards or far inwards (usually the latter) so that its image is not any more observed by the child. Thus the diplopia is remedied.

This explains why it is that the eyes of some children become strabismic so suddenly and so early in life.

In all such cases the deformity can be greatly relieved by the usual operation, but binocular vision is impossible.

Correct diagnosis of non-identity of the retinae cannot be made till an operation brings the eyes straight enough to develop double vision; then the position of the images at once settles the matter. Such cases of strabismus are usually of a very high degree.

In my judgment there is no doubt but that incongruence or non-identity of the retinae is a frequent cause of convergence or divergence. I have seen several such cases.

The Transplantation of Rabbit's Conjunctiva to the Human Eye.—Heretofore plastic operations on the conjunctiva have been made by drawing adjacent healthy conjunctiva into the place where it is needed, and fastening it there by stitches till it firmly adheres. Burns and injuries often make such operations very necessary.

They are not often successful for the reason that so little healthy conjunctiva can be spared in such cases.

More recently plastic operations on the conjunctiva have been made by transplanting a portion of a rabbit's conjunctiva, of proper size, to the human eye. The great difficulty in this operation is the fact that the excised piece of rabbit conjunctiva contracts so much and rolls together so that it is very difficult to get it of the right size and then to spread it out so as to get it properly adjusted. Of course, there must be no delay in getting the excised piece into position, where it must be held by proper stitches. There is always great danger that it may fail to heal.

Whether this operation will ever become a fixture in the surgery of the eye remains to be seen.

The use of the Prepuce in Plastic Operations on the Lids.—Formerly in plastic operations on the lids the portion of skin to be used has been taken from the temple or from one or the other of the arms.

This method of operating has many objections. Several writers have recently proposed to use the prepuce to supply the deficiency in the skin of the lids. Of course, in the latter operation the prepuce must be entirely detached and actually transplanted to the lids while in the old operations a pedicle is always left to supply nourishment to the flap until it grows fast in its new position.

Boy children among Jewish people are uniformly circumcised at a certain age. It is proposed to use these abscised prepuces in making plastic operations on the lids. In the case of a male where no "circumcised" foreskin can be had he would have to allow the use of his own prepuce for his own good. In the case of a female she would have to "borrow" a prepuce from a male friend.

While there are several reasons why the prepuce should be preferred over the common skin there is one serious objection. The "stinking" secretion that is peculiar to the prepuce would be very objectionable on the lids.

Temporary Mental Aberration from the use of Atropine in the Eyes.—Some time since I operated on a boy, about 14 years old, for convergent strabismus. It became necessary to increase the effect of the operation by the use of atropine in the eyes. The boy became at once so crazy that he had not the slightest idea of what he was doing. He would wander about aimlessly and talk incessantly to absent friends. Would not eat and could not sleep; in fact he would not be still anywhere. He went to the woodshed and picked up a stick of wood, took it into the house and petted it as his "beautiful little dog." He went to his father's shop, returned and said the shop was burnt up but he had saved the money box! In disposition he was very pleasant but could not comprehend anything. I remember several persons, who after cataract operations, in some unaccountable way, lost all their mental facilities, but I will not detail the cases here. Now, I believe that the mental disturbance in these cases was due to the use of atropine in the eyes.

In the case of the boy all mental trouble ceased at once on stopping the atropine.

Medical Progress.

THERAPEUTICS.

Acorn Cocoa in the Treatment of Diarrhœa and Vomiting in Children.—It is a well-known fact that, during the hot weather, there is a large number of cases of diarrhœa with vomiting in children. It has been a question in such cases as to what remedy will prove efficacious and what food can be retained. F. W. Elsner speaks very highly of acorn cocoa in these cases (*Australasian Medical Gazette*) stating that in a series of cases which he observed one-half had been given every approved remedy without success. In these as well as in those where the acorn cocoa was the first medicine administered its effect was rapid and complete, and it never took more than two days to bring about improvement, whilst twelve days was the outside at which a complete cure was effected. Acorn cocoa is a preparation of ordinary cocoa powdered and freed of fat, to which are added the soluble parts of roasted acorns, without cellulose, a little sugar and roasted flour which was first suggested by Liebreich.

Preliminary Notes on some of the Properties of Sodium Fluoride.—Fluorine is the only member of the halogen group that seems to have been neglected by the therapist. The value of the salts derived from the other members of this group is conceded by all and it is probably due to the fact that the chemistry of fluorine, in the free state, has never been satisfactorily determined that its neglect in pharmacy has occurred. Dr. Louis Kolipinski has made a series of experiments (*Medical News*) with sodium fluoride recently and he has found that it possesses weak germicidal and stronger antiseptic powers. The taste of this salt is alkaline and salty. In medicinal doses it is readily absorbed and eliminated by the kidneys. In prescribing it, it should be given in aqueous solution and it is preferable to give an equal proportion of bi-carbonate of sodium with it. The limit of a dose

for a child is the quarter of a grain, whilst the remedial doses range from one-eighth to one-sixth of a grain thrice daily. It produces gastric irritation, and nausea and vomiting should be followed by a diminution of the dose. Dr. Kolipinski has found the drug successful in the treatment of headache in children and says that the result of the treatment of intermittent and remittent fevers was very encouraging. The effects of this drug in a few cases of epilepsy major, although not marked, were very favorable and as the writer suggests, the symptoms of bromism may be obviated by replacing at intervals the salt producing them by the fluoride.

Local Anæsthetics.—The cry at present seems to be to obtain some local anæsthetic which is reliable. The intolerable itching which is found to occur in various portions of the body without any appreciable cause necessitates a palliative which will not fail at the critical moment. Pruritus ani and pruritus vulvæ are two of the most distressing complaints the physician is called upon to relieve and the journals seem to be full of specifics for their relief. Borax, chloral, morphine, and a legion of other remedies have been vaunted and have failed repeatedly. We find that lately Dr. Mayo claims that a five to a ten per cent. solution of brucine is efficient. Belladonna has been found useful and since the advent of lanolin many of the remedies which had been discarded have been adopted again and proven more or less efficient. One of the simplest and best remedies is the douche of hot water containing a slight amount of boracic acid (1: 100) followed by a soothing application. Cocaine with lanolin as a vehicle is also good, but in all of these cases it will be found that the relief is, at best, only temporary.

Iodide of Potassium in e Broncho-Pneumonia of Children.—Dr. Zinnis, of Athens, having observed the good effects of iodide of potassium in the dyspnœa due to emphysema (*Journal de Mèd et de Chir. Prat.*) employed it also in broncho-pneumonia. It is more particularly valuable in primary cases and in children of a robust type and principally in the acute form of the disease. The drug given in doses of 15 to 30 grains in 24 hours, according to the age, and dissolved in about two ounces and a half of distilled water, will often cause the temperature to fall one or two degrees C. in two or three days. Besides this, it sensibly diminishes the frequency of respiration, renders the

cough more loose and facilitates expectoration. Auscultation will, at the same time, show an improvement in the physical signs. One point to be observed in connection with this subject is that if there is no palpable improvement at the end of two or three days, it is useless to continue the administration of the iodide of potassium. Besides, the drug should be administered with caution and its toxic effects looked for carefully and as soon as any sign of iodism shows itself it should be discontinued.

GYNÆCOLOGY AND OBSTETRICS.

Cardiac Neuroses in connection with Ovarian and Uterine Disease.—Dr. H. J. Boldt writes an interesting article upon this subject in the *American Journal of Obstetrics*. He states, among other things, that there is a large number of patients afflicted with uterine or ovarian disorders who also suffer from nervous heart affections; on the other hand, some cases are seen who give only a history of the latter, in whom this will be found to depend upon the former disorder. On this account it is necessary to make a careful examination of the reproductive organs, if no other *positive* cause can be found to account for the neurosis. When this neurosis is due to ovarian lesion it is usually the left ovary which produces the mischief, a point which has been noted by J. Milner Fothergill. These conclusions are based, not upon a few isolated cases but upon the observation of nearly two thousand patients taken as they came. In addition the treatment of the pelvic organs was successful in causing the neurosis to disappear after the treatment of other organs had been thoroughly tested.

Vulvo-Rectal Fistula due to Coition.—A case of this rare form of injury to the vulva was lately reported to the Obstetrical Society of Philadelphia by Dr. Joseph Price for Dr. Barton Hirst. Although, of late years, sixteen cases of rupture of the vagina have been reported as occurring during coition, only one of them which was reported by Blumenthal and operated on by Sir Spencer Wells in 1860, bears any resemblance to the present one which is without doubt one of vulvo-rectal fistula. The patient, a young woman of 22, had been a perfectly healthy woman previous to her marriage, which took place eighteen months ago. From the first attempt at sexual intercourse with her hus-

band her trouble began. The sexual act was followed by severe hæmorrhage, which persisted for a month; the passage of fæces and flatus per vulvam was noticed at once. Every repetition of the sexual act for the next two or three weeks, was followed by bleeding and at present the rectum is entirely evacuated through the vulva, there being entire inability to retain fæces or flatus. Examination showed that there existed a hymen, of moderate thickness and rigidity which was perfectly intact, and having a small anterior opening. In front of its posterior attachment there existed an irregular transverse tear about one and a half inches in its longest diameter and extending backward and upwards about one and a half inches, exposing to view the mucous membrane of the bowel. The edges of this tear are everted and thickened. The vagina small and evidently had never been entered. An operation, consisting in freshening the edges of the tear, partially loosening the hymen from its attachment and using it as a flap to supply the deficiency of tissue, was performed by Dr. Price in March, 1886. The closure was perfect and resulted in perfect union.

The Aftertreatment of Grave Laparotomies.—Dr. P. Mueller, of Berne, at the first meeting of the German Gynæcological Association, held at Munich, in June, stated that among the special dangers following laparotomy may be mentioned the disturbances of the intestinal tract which occur in the form of inflammatory processes taking place around the pedicle after ovariectomies or in some intestinal loops becoming adherent to raw surfaces. Where large portions of the intestine must be detached and extensive raw surfaces left, the danger becomes greater and more especially as the compressive bandage, which must be applied, tends to keep the raw surfaces together. The prevention of these adhesions might be accomplished by injecting fluids into the abdominal cavity so as to keep the parts separated for a few days immediately after the operation. The fluid used must be aseptic, non-irritating, have no toxic influence and be readily absorbed or removed. Dr. Mueller claims that a sterilized 0.7 per cent. solution of table salt fills these conditions. In one case he injected 2,400 grm. (80 oz.) which only at first was followed by disturbance consisting of a rise of pulse and respiration. These phenomena were due to a too rapid absorption, not to sepsis. This overfilling of the circulation and overtaxing of the heart might be perhaps avoided by injecting a smaller quantity of this solution from

time to time and allow it to escape through the drainage tube. This suggestion is certainly a valuable one as cases of death occasionally occur from adhesions of the intestines giving rise to constriction or incarceration.

SURGERY.

Etiology and Pathogenesis of Acute Osteomyelitis.—At the fifteenth Congress of the German Surgical Society Dr. Kraske stated that as the result of his bacteriological investigations he had come to the following conclusions: The pyogenic micro-organism known as the *staphylococcus pyogenes aureus* is alone capable of producing acute osteomyelitis in man and is, in fact, most often concerned in its production. Besides this he has found that in a number of cases, other micro-organisms such as the *staphylococcus pyogenes albus*, the *streptococcus pyogenes* and bacilli play a certain role in addition to the *staphylococcus pyogenes aureus*. Then acute osteomyelitis is the effect of "mixed" infection. Cases of osteomyelitis which are produced by a "mixed" infection seem to acquire a certain degree of severity during the whole course of the disease. From this it may be concluded, until further knowledge of the subject is acquired, that the finding of different kinds of organisms in an abscess, due to osteomyelitis, is a sign of a grave prognosis. It is possible that further investigations will establish as a fact that any micro-organism, which has pyogenetic properties is capable of producing by itself a typical osteomyelitis in man. At all events, the assumption that osteomyelitis is a specific infection must be abandoned.

A New Method of Fixing the Fragments in Complicated Fractures.—At the same meeting Dr. Hausmann, of Hamburg, detailed a method employed by him and which is applicable chiefly to those bones which are subcutaneous. A nickel-plated piece of untempered rolled steel is bored with a number of holes and placed across the site of fracture, on the bone. Nickel-plated screws having shoulders, are then screwed into the bone through the metallic plate which is thus used as a splint. Provis-

ion is made to turn up one end of this plate so that it will project outside of the integument and then the skin is sewed over this and a drainage tube inserted, or a protective dressing applied to the wound. The screws are allowed to remain *in situ* until they become loose, which will occur in from four to eight weeks, when the whole fixing apparatus is to be removed. The originator of this method claims that it has been used in eight complicated fractures of the leg, three of the thigh, one of the radius, one of the olecranon, two of the lower jaw, in one case of pseudarthrosis of the radius, in one of the ulna, in one of the leg, and in one of the thigh. The only objections we can see to this method are that it induces necrosis, which the author claims is a favorable thing in such cases; and that it is not mechanically a good appliance. It is essentially a very short splint in which the leverage is very small and the tearing out of screws is a comparatively easy matter, especially as softening of the bone tissues will take place around them in a comparatively short time after their introduction.

The *Texas Courier of Medicine* has changed its address from Ft. Worth to Dallas, Texas.

Mrs. Ada Torrey Grant, the wife of I. S. Grant (Bey), who made a name through his cholera investigations, died at Cairo, Egypt, July 23rd 1886. We extend our sincere condolences to the afflicted husband.

Ordinary glazier's putty is said to be an excellent remedy for pruritus ian by Dr. A. C. Bernays. Although it only effects temporary relief it is a very grateful application.

New Instruments.

A NEW TRACHEOTOMY DILATOR.—By WALDO BRIGGS, M. D. of St. Louis, Mo.

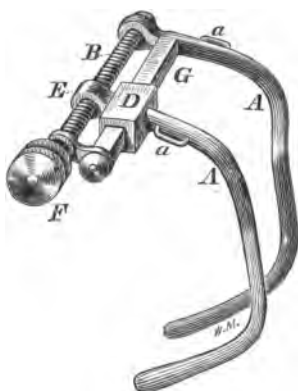


Fig. 5. New Tracheotomy Dilator.

Surgeons who perform frequent tracheotomy operations have long felt the need of some practical substitute for the different forms of tubes which have hitherto been used. An instrument which could be more easily introduced, and that would retain itself in the trachea, one that would require less watchfulness and care on the part of the attendants, and was not liable to become clogged by the mucous or false membrane, and that did not of itself cover so much of the wound, and above all, something which would admit of dilation of the lesion if such became necessary.

The dilator is provided with loops (a. a.) for the insertion of tapes to keep same in its place, but, as the instrument is self-retaining by the form of the blades it will be rarely necessary to use the tapes.

The instrument as shown in above cut, consists of two narrow blades (A. A. of solid steel, curved as shown in the engraving and convex on the outer sides, the inner side of each blade being

made flat, so that they may approach each other more nearly when closed,) one of these blades, the left, is stationary, while the other slides by means of box D, upon the bar G, receiving its motion from the screw B, through the screw nut E. The screw is provided with a milled head, which renders the adjustment of the blades a rapid and easy operation. It is inserted and used as follows:

The blades of the instrument should be screwed up in close contact to each other before the operation is commenced. After the trachea has been reached and the incision made into it, the knife should be retained within the trachea, and the blades of the dilator inserted by slipping them in alongside of the blade of the cutting instrument, which thus acts as a director for them. This done, the knife may be withdrawn and the blades of the dilator separated to a proper distance. Should the wound become clogged at any time, the blades may be further separated, which will dilate the trachea and cause the obstructing material to be coughed out, or, it may be removed by the forceps or other suitable instrument.

This instrument was manufactured for me by Hernstein & Prince 317 N. 4th St., St. Louis.

The second meeting of the Spanish Society of Laryngology, Otology and Rhinology will take place Sept. 29 to Oct. 2. The Principal questions to be discussed are: 1. The diagnosis of syphilitic manifestations in the larynx; and 2. Surgical perforations of the membrana tympani.

The British Medical Association held its 54th Annual meeting Aug. 10-13th. Dr. Jno. S. Billings made the Annual Address in Medicine acquitting himself in a creditable manner. The late Dr. Austin Flint was to have made the address.

New South Wales, we learn from the *Australasian Medical Gazette*, has a new Medical Practitioner's Bill under consideration and, as is usual in such cases, the quacks are rushing into print or paying some one to do it, and are attempting to kill such legislation.

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Necrology.

FRANK HASTINGS HAMILTON, M. D., LL. D.

The profession of the United States has learned with sorrow of the death of Dr. Frank Hamilton. The immediate cause of his death, which occurred Aug. 11th was loss of the power to appropriate nutriment. For more than three years he had been on the decline which was hastened by pulmonary hemorrhages which had taken place of late, and had made serious inroads upon his system.

Dr. Hamilton was born in Wilmington, Vt. in Sept. 1813. At the age of twenty he graduated from the medical department of the University of Pennsylvania. He practiced, for a time, in Auburn N. Y. whence he removed to Buffalo and finally made New York his residence in 1862. He was, for a number of years, Professor of Surgery in the Bellevue Hospital Medical College and continued to be consulting surgeon to a number of New York hospitals and dispensaries up to the time of his death. As a teacher of surgery he was excellent and his contributions to surgery have been numerous and valuable. His principal works are his Treatise on Military Surgery, his Treatise on Fractures and Dislocations and his Principles and Practice of Surgery which was issued but a short time since. Besides these valuable works he has made numerous contributions to the medical journals.

Dr. Hamilton made his mark in American Surgery and his influence upon it is one which will prove of lasting character. Although conservative, to a great degree, in his ideas of late years, he was sufficiently radical in questions of such moment as antiseptics in surgery and similarly important surgical principles.

The death of Dr. Hamilton has profoundly impressed the profession of the United States and those who knew him best feel his loss most keenly. The New York Academy of Medicine will hold a memorial meeting in his honor on Sept. 9th 1886.

WILLIAM L. BARRETT, M. D.

We are called again to chronicle the sad intelligence that another St. Louis physician has been called over to the silent majority. Dr. Barrett not long since left for Asheville, N. C. on account of the precarious state of his son's health. That son died lately and, in a few days, it seems, news was received of the father's death which occurred on Aug. 20th.

Dr. Barrett was born in St. Louis, March 5th 1843. He was partially educated at Washington University but finished in Burlington, Ills., where the family resided. In 1861 he returned to St. Louis and entered the United States Medical Purveyor's office. He began his medical studies in the St. Louis Medical College leaving it in a year and going East. He graduated at the Bellevue Hospital Medical College in 1866 and then pursued his studies in Charity Hospital, afterwards being with Dr. Thomas Addis Emmett for some time. Upon his return to St. Louis he was placed in charge of the Health Department and when his time had expired he entered upon the practice of medicine, his principal efforts being exercised in the direction of Gynecology.

For a number of years, Dr. Barrett was a lecturer upon his specialty at the St. Louis Medical College and, at the time of his death, occupied the chair of gynecology in that institution. Besides this he was one of the chief promoters of St. Luke's Hospital.

Dr. Barrett was one of the few who can lay claim to the title of self-made. His abilities were recognized everywhere and had he not been struck in the flower of his manhood, he would have left a more fixed influence upon the literature of his specialty. His literary work was confined to his work in medical societies and his contributions as a member of the staff of the *Weekly Medical Review*. His loss will be severely felt by the journal to which he lent no inconsiderable share of force and vigor.

In St. Louis Dr. Barrett was well-known and deservedly popular. His absence among us will be keenly felt and the physicians who were watching his progress with much interest will not be among those least affected.

The funeral, which took place on the 23rd of August, was largely attended, a meeting of the profession having been held on the same day to pass resolutions respecting the deceased.

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Book Reviews.

Medicine of the Future. An address prepared for the annual meeting of the British Medical Association in 1886. By Austin Flint (Senior), M. D., LL. D. Price \$1. [New York: D. Appleton & Co., St. Louis: J. L. Boland, 610 and 612 Washington Ave. 1886.]

This is an exceedingly interesting monograph, containing the views of one whose retrospective extends over half a century. The value of the work is greatly enhanced by a fine likeness of the author.

A Manual of Practical Therapeutics, considered with reference to articles of the *materia medica*. By Edward John Waring, C. I. E., M. D. Edited by Dudley W. Buxton, M. D., B. S. Lond. Fourth Edition, pp. 666. Price, cloth \$3, sheep \$3.50 [Philadelphia: P. Blakiston Son & Co., St. Louis: J. Linahan. 1886.]

Dr. Waring personally revised two-thirds of the work, striking out articles of little or no importance. At this stage of the work failing eyesight compelled him to call in the service of an assistant and in Dr. Buxton he found an able editor. The work is thoroughly practical. The student will, however, have to be particular to refer constantly to the list of errata.

Manual of Differential Medical Diagnosis. By C. W. Cutler, M. S., M. D. Price \$1.25. pp. 161. [New York & London: G. P. Putnam's Sons. St. Louis: J. L. Boland, 610 and 612 Washington Ave., 1886.]

This is a concise and well written little work and may be of great aid to the young general practitioner. The author, although not relying upon any one symptom as diagnostic, has limited himself to those that afford the most striking contrast.

A Treatise on the Diseases of the Nervous System. By William A. Hammond, M. D. With 112 illustrations. Eighth edition, with corrections and additions. pp. 945. Price \$5. [New York: D. Appleton & Co., St. Louis: J. L. Boland, 610 and 612 Washington Ave., 1886.

Besides a thorough revision the author has added a section on "Certain Obscure Diseases of the Nervous System," i. e. Tetany, Thomsen's Disease, Miryachit and Kindred Affections. Dr. Hammond's reputation as an author needs no comment from our pen in order that this book may be well received.

A Reference Handbook of the Medical Sciences, embracing the entire range of Scientific and Practical Medicine and allied sciences. By various writers. Illustrated by chromolithographs and fine wood engravings. Edited by Albert H. Buck, M. D., New York City. Vol. III. pp. 813. [New York: Wm. Wood & Co., 1886.

The third volume of this great work again impresses the reviewer with the magnitude of the undertaking, both of the editor and publishers. We are happy to state that in point of scientific worth it is fully up to the standard of the preceding volumes. The list of contributors contains the names of the bright lights in all the larger medical centres.

A System of Practical Medicine by American Authors. Edited by William Pepper, M. D., LL. D., assisted by Louis Starr, M. D. Volume V. *Diseases of the Nervous System.* pp. 1326. [Philadelphia; Lea Brothers & Co. 1886.

In noticing this the concluding volume it may be of interest to enumerate some facts in regard to its production. Heretofore all great works on medicine have come from the far East. Lea Brothers & Co. undertook to give the American practitioner a work at once complete and by American Authors. How well they have succeeded the large sale of the work and the flattering notices it has received will testify. The number of articles is 185, written by 99 authors, covering, with indexes, about 5600 pages, and throughout its whole extent the original purpose has been kept constantly in view, that the practical character of the work should adapt it specially to the needs of the general American practitioner. The editors have fully succeeded in their object.

1886]

Books and Pamphlets Received.

Intubation of the Larynx for Diphtheritic Croup. By E. Fletcher Ingals, A. M., M. D. Reprint from *Journal of the American Medical Association*. 1886.

Hahnemann Medical College of Chicago Ills. 27th Annual Announcement 1886-7.

Rational Medicine and Homœopathy in relation to Medical Ethics. By Romaine J. Curtiss, M. D., Joliet Ills. 1886.

The State Control of Medical Education and Practice. (In the negative.) By Romaine J. Curtiss, M. D., Joliet, Ills.

The Hygiene of Nature or Natural selection and immunity from disease. By Romaine J. Curtiss, M. D., Joliet, Ills.

Report of Proceedings of the Michigan State Board of Health. Regular meeting, July 13th 1886.

Western Pennsylvania Medical College, Pittsburgh. Announcement for 1886-7.

St. Louis Medical College, of St. Louis, Mo. 45th annual announcement, session 1886-7. (Regular course commences Monday Sept. 20th 1886, and ends April 30th 1887.)

Boston University School of Medicine. 14th Announcement and Catalogue. 1886-7.

National University, Medical and Dental Department, of Washington D. C. Annual Announcement 1886-7.

An Address delivered before the Alumni Association of the Department of Medicine of the University of Michigan, July 30th 1886. By Charles Lundy A. M., M. D. Ann Arbor, 1886.

Tokology. By Alice B. Stockham, M. D. Chicago, Sanitary Publishing Co. 1886.

Trigger Finger (doigt à ressort). By George W. Jacobi, M. D. Reprint from the *New York Medical Journal*, June 10, 1886.

Medcial Education and Medical Licensure. An Address delivered before the two-hundred and thirtieth University Convocation at Albany, July 9, 1885. By William H. Watson, A. M., M. D. Reprinted from the Report of the Board of Regents to the Legislature. Albany. Weed, Parson & Co., Printers. 1886.

Annual Report of the Health Commissioner (of St. Louis) for the Fiscal Year ending April 13, 1885. 8 vo. pp. 67—x.

Fifth Annual Announcement of Quincy College of Medicine Département of Chaddock College, Quincy, Ills. winter of 1886—7

Beaumont Hospital Medical College of St. Louis. Announcement, session 1886—87.

Positive Medication. A pamphlet on Alkaloids, Alkametric Granules, and Alkadermic Pellets. Published by Frederick Stearns & Co. Detroit, Mich.

Proceedings Twentieth Annual Session of the Missouri Press Association held at Mexico, Mo., May 11th. and 12th. 1886. 8vo. pp. 96.

Report of the Delegates from the Philadelphia County Medical Society to the 37th. Annual Meeting of the American Medical Association; with the Resolutions of the Philadelphia County Medical Society in relation thereto. Published by order of the Society. 8 vo. pp. 20. Phil. 1886.

Ichthyol und Resorcin als Repräsentanten der Gruppe Reduzierender Heilmittel von Dr. P. G. Unna. (Dermatologische Studien. Zweites Heft.) 8vo. pp. 85. Hamburg und Leipzig. 1886.

Texas State Medical Association. Synopsis of Report of the Special Committee on Surgery, presented at the annual Meeting at Dallas, April, 27th. 1886. 4 to. pp. 11. San Antonio. 1886.

Annual Announcement and Catalogue of the St. Louis College of Physicians and Surgeons. Session 1886—7.

Forty-sixth Annual Announcement and Catalogue of the Missouri Medical College. Medical Department of the University of the State of Missouri, Section No. 2.

Impetigo Contagiosa.—By E. J. Beall, M. D. Reprint Daniell's *Medical Journal*, August, 1886.

Bericht ueber die Verhandlungen der deutschen Gesellschaft fuer Chirurgie, XI. Kongress, abgehalten von 7-10 April 1886. Beilage zum Centrablatt fur Chirurgie 1886. No. 24. 8vo pp. 107.

Melange.

In conjunction with other journals, we have been informed by Messrs. Wm. Wood and Co., of New York, that, in future, the express and freight charges on all books for review sent by that firm must be paid by the journal to which they are sent. This is decidedly a new departure and, in conjunction with a number of other journals, we have decided not to pay for the distinguished privilege of advertising Messrs. Wm. Wood & Co's. books. We have always endeavored to give honest reviews of books for the benefit of our readers and will continue to do so. We do not consider ourselves under any obligation to a book publisher when he sends us a volume for review, but we are morally obliged to tell our readers if it is worthy of their perusal or study. Publishers may argue that it is a great expense to them to pay transportation for their publications, but it is a greater hardship to expect a journal to pay the same, especially if as occurs sometimes, the book is not worth the amount of freight charged. We hope that book publishers will give this subject some consideration and not commit the error made by Wm. Wood & Co., who will, no doubt, before long see the mistake they have made.

The American Rhinological Association meets in St. Louis, Mo., Oct. 5th, 1886. From its Secretary, Dr. P. W. Logan, of Knoxville, Tenn., we give the following partial list of papers to be read at this meeting:

A Mixed Form of Atrophic and Hypertrophic Catarrhal Inflammation (heretofore undescribed), and its Treatment. By P. W. Logan, M. D., Knoxville, Tenn.

Thoughts Relating to the Naso-pharyngeal Tract. By J. W. Fink, M. D., Hillsboro, Ill.

The Future of Rhinology. By Carl H. Von Klein, M. D., Dayton, Ohio.

Necrosis of the Nasal Bones. By H. Jerard, M. D., East Lynne, Mo.

Oleate of Quinine in Nasal Catarrh. By Jno. D. Sympson, M. D., Bloomington, Ind.

New Methods in the Treatment of Catarrhal Inflammation of the Nose and Throat, including Diphtheria, etc. By H. Marks, M. D., St. Louis, Mo.

Treatment of Pruritic Catarrh (Hay Fever). By Thos. F. Rumbold, M. D., St. Louis, Mo.

The Importance of Constitutional Remedies in the Treatment of Chronic Catarrhal Inflammation of the upper Air Passages. By H. B. Logan, M. D., St. Louis.

Treatment of Acute and Chronic Inflammation of the Superior Respiratory Passages. By W. G. Lipes, M. D., Toledo, Ohio.

Colds in very early Infancy; how taken and how prevented. By H. F. Hendrix, M. D., St. Louis, Mo.

The Importance of Early Recognition and Treatment of Naso-aural Catarrh. By N. R. Gordon, M. D., Springfield Ills.

The prospects of a large attendance, by physicians from distant States, are very good.

All information concerning membership, etc., will be given by the President, Dr. A. De Vilbiss, Toledo, Ohio, or by the Secretary, Dr. P. W. Logan, Knoxville, Tenn., or by the Chairman of the Committee of Arrangements, Dr. H. F. Hendrix, Cor. Jefferson Ave. and Biddle Street, St. Louis, Mo.

The following questions relating chiefly to the effect of overflows and rice culture upon the public health have been prepared by Dr. Joseph Jones, of New Orleans, President of the Section on Public and International Hygiene of the International Medical Congress. All medical men, who can furnish a full and specific answer to any or all of these questions, are earnestly requested to communicate the same to Dr. Richard H. Day, P. O. Box 181, Baton Rouge, La.

Question 1. How long have you been cognizant of the results of overflows of the Mississippi river and its tributaries upon the Public Health?

2. Have you closely observed the effects of said overflows upon the Public Health?

3. Have you generally or uniformly observed an increase of sickness immediately succeeding these overflows?

4. If so, what disease in the lowlands and swamps upon said prisoners? Their character and type?

5. What local or general conditions (including topography) have you noted, controlling or modifying the effects of overflows upon the Public Health?

6. Have you kept statistics of the number and date of these overflows, and the cases of sickness (if any) resulting therefrom? If so please give these statistics.

7. What is your experience of the effect of rice-culture upon the Public Health? and what the rate of death per 1000 population before and since the commencement of rice-culture?

8. Has malarial hæmaturia increased in frequency and severity during the past forty years? And is said increase due to the increased cultivation of rice in the Delta of the Mississippi river, or in other localities where rice is cultivated?

9. What effect has the camping and working of State Prisoners in the lowlands and swamps upon the said prisoners, held by Louisiana, Arkansas, Mississippi or other States so employing their prisoners.

10. How many deaths have been caused among State prisoners by malarial diseases, directly traceable to exposure to the malaria of the swamps?

11. Give facts bearing upon the relative effects of overflows and rice-culture upon the colored and white races?

12. Relations of drinking water to the *health* of the inhabitants of rice, sugar, and cotton plantations? Effects of swamp water? effects of cistern, well and spring water, for drinking purposes?

13. The best means of protecting the health of the laborers and inhabitants in such localities?

The physicians of the valley of the Mississippi river and the rice regions of Arkansas, of Alabama, Georgia, North and South Carolina, Florida and Texas, are earnestly requested to furnish replies.

A Number of Prominent physicians have lately died in Europe. Among the most prominent may be mentioned Prof. H. Mass, the celebrated surgeon, of Wurzburg; Prof. Joseph Kanlich, who taught pædiatrics at the German University, of Prague; Prof. Grigori Sokalski, of Moscow, who was the first one to deliver lectures in Russia upon the diseases of the mind; and Francis Mason, of St. Thomas's, London, who made such a reputation through his work on the transplantaion of skin.

International Medical Congress.—The following, from circular No. 2 of the Ninth International Medical Congress which meets in Washington, Monday, Sept. 5th. 1887, contains all the matter which is of immediate interest at present:

The Congress will consist of such members of the Regular Medical Profession as shall have registered and taken out their ticket of admission, and of such other Scientific men as the Executive Committee of the Congress shall deem it desirable to admit. The books for the Registration of Members will be open from 9 A. M. to 5 P. M., on Thursday, Sept. 1st, 1887, and on each subsequent day during the Session, under the charge of the "*Reception Committee*." Any member desiring to anticipate this Registration, can apply by letter to the Secretary General and forward his dues, with his address in full, when a receipt will be returned.

The dues of Membership for residents of the United States will be Ten dollars (\$10.00). There will be no dues for members residing in other countries. Each member will be entitled to receive a copy of the "*Transactions*" of the Congress, when published by the Executive Committee.

The General Sessions of the Congress will be devoted to the transaction of business and Addresses and Communications of general scientific interest, by members appointed by the Executive Committee. A printed "*Programme*" of the Sessions will be presented to each member on registering. A printed "*Order of Business*" for each day will also be issued.

The work of the various Sections will be directed by the President of the Section, and the order will be published in a daily Programme for each Section. Questions and topics that have been agreed on for discussion in the Sections, shall be introduced by members previously designated by the titular officers of each Section. Members who shall have been appointed to open discussions, shall present to the Secretaries of the Section, in advance, statements of the conclusions which they have found as a basis for the debate

Brief abstracts of Papers to be read in the sections shall be forwarded to the Secretaries of the proper Section on or before *April 30th, 1887*. These abstracts shall be treated as confidential communications, and shall not be published before the meeting of the Congress. Papers relating to topics not included in the list of subjects proposed by the Officers of the Sections, may be accepted after April 30th, 1887, and any member wishing to introduce a topic not on the list of subjects for discussion, shall give notice of the same to the Secretary General, at least twenty-one days before the opening of the Congress. The titular officers of each Section shall decide as to the acceptance of such proposed communications, and the time for their presentation. No communication shall be received which has been already published or read before a Society.

The official languages of the Congress shall be English, French and German. Each paper or address shall be printed in the "*Transactions*" in the language in which it was presented. Preliminary abstracts of papers and addresses shall be printed in the language in which each is to be delivered. All discussions shall be printed in English.

The Executive Committee cordially invites members of the regular medical profession, and men eminent in the sciences collateral to medicine, in all countries, to participate, in person or by papers, in the work of this great humanitarian assembly. Communications relating to appointments for papers to be read in the Congress should be addressed to Dr. John B. Hamilton, Secretary General of the Ninth International Medical Congress, Washington, District of Columbia. All questions or communications connected with the business of the Executive Committee should be addressed to Dr. Henry H. Smith, Chairman of the Executive Committee of the Ninth International Medical Congress, Philadelphia, Pennsylvania. Gentlemen named in any position in the Congress are requested to

notify the Chairman of the Executive Committee, as soon as practicable, of any error in the name, title, or address in this circular.

Ladies in attendance with members of the Congress, and those invited by the "Reception Committee," may attend the General Sessions of the Congress when introduced by a member. They will also be invited to attend the Social Receptions. The Executive Committee reserves the right to invite distinguished persons to any or all the meetings of the Congress. The attendance of Medical Students and others interested in the work of the various Sections or in the general addresses delivered in the Congress, will be permitted, on the recommendation of the Secretary General or the officers of a Section, on their taking out from the Registration Committee a general ticket of admission, fee one dollar (\$1.00); but such persons cannot take part in the proceedings.

As we are going to press we learn that the mayor of St. Louis has appointed the successor of Dr. D. V. Dean, late Superintendent of the City Hospital. Dr. H. C. Dalton, who was appointed to this position on August 31st, is a gentleman who is eminently qualified to fill the position. He graduated in Medicine in 1870 from the Missouri Medical College and then served for two years as interne of the City Hospital under the régime of Dr. T. F. Prewitt. He then removed to Neosho, in the Southwestern portion of the State and soon built up a large and lucrative practice. Some two years ago he removed to this city on account of his health, and he has proven himself a capable and conscientious physician as well as a close student and hard worker. We are certain that the medical profession will look upon Dr. Dalton's appointment, to the charge of the City Hospital, as a well-merited compliment to his skill and ability and all will feel perfectly safe in the consciousness that the affairs of that institution will be administered properly and in a manner to reflect credit upon all.

Hydroleine, See Adv. Page 8.

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THE SAINT LOUIS Medical and Surgical Journal.

VOLUME LI.—October 1886.—No. 4.

Original Contributions.

THE VALUE OF LISTERISM.—BY ROMAINE J. CURTISS, M. D., Professor of Hygiene, College of Physicians and Surgeons of Chicago, Ill.

Surgeons may be divided into two classes, from the standpoint of the germ theory, viz: those who practice the art of poisoning germs in surgery, and those who advocate and practice what they are pleased to call "cleanliness."

The art of cleanliness in surgery is certainly very old, but, in the light of modern science, the term, and method, and practices are almost meaningless for the following reasons: Cleanliness means the removal of dirt, mostly inorganic dirt, at least. The germs and spores of septic or surgical fevers are not dirt, nor will cleanliness injure them in the least. In fact, the usual methods of cleanliness without germitoxics, are very uncleanly so far as germs are concerned. Of course when a surgeon advises cleanliness he means soap and water and generally says so. If he adds a germitoxic to the water or boils it, then his method approaches Listerism. These clean methods are not clean in the sense of preventing disease, for infected soap and water may themselves contain the germs of surgical fevers; however, they may succeed in washing away dirt, or blood, or pus.

A year or two ago a prominent surgeon published a brilliant clinical report entitled "Two Ovariectomies in One Day." Now, from the business standpoint this title indicates brilliant business, and no mistake. But this was not the only point made by the surgeon. The other point was that no Listerism was used in these cases; and there was recovery in both cases without untoward symptoms, at least without any symptoms of septic infection. Now, I suppose about one-third of the medical men who read such a report and the many others like it, will pour out a sort of libation, in the shape of a smile or a sneer in diversion of modern surgical faith, and in honor of old gods in surgery. In fact this

is about the manner of stating the present attitude of surgical science in relation to surgical fever; and the proposition may be put as follows: Why is it that one surgeon uses germitoxics in surgery and has two cases in ten of surgical fever, while another surgeon may have equally good results who uses only "cleanliness?"

But the general problem of the relations of surgery to surgical fever contains more factors than Listerism and cleanliness, and from a general basis the comparative results of the two methods are greatly in favor of Listerism so far as the development of pus, pyæmia, gangrene, erysipelas, etc. are concerned. In order to appreciate these things some of the other factors must be brought up, and a study of these factors will show us why Listerism may fail, and why this cleanliness business may succeed.

WHY LISTERISM MAY FAIL.—The two apparent reasons why Listerism may fail depend upon the fact (1) that the germitoxics and dressings may not be sufficient from some reason to keep the septic or other germs out of the wound, and (2) the germs may enter the system by some other door than the wound, and cause surgical fever.

CASE.—A laborer in the Joliet Steel Co's. Works, aged about 35, had been in poor health for two weeks, having bloody diarrhœa and indigestion. He apparently recovered and resumed work, one Monday morning about three months ago, saying he never felt better in his life. During the forenoon, just from exuberance of good feeling, he undertook to make a car-coupling which was not a part of his duty, and he met the common fate of men who run trains and couple cars and had his left thumb crushed. I amputated the thumb at the carpal articulation. The work was done with the best available germitoxic precautions. Instruments were put into a strong mixture of listerine. Two arteries were tied with carbolized cat gut. The skin was cleaned with solution of corrosive sublimate 1:1000, and flaps irrigated with the same, 1:3000. In addition iodoform was freely peppered over the flaps; the flaps secured by catgut; stump covered with sublimate gauze, antiseptic cotton and oil silk.

I called on the patient next day, (Tuesday), but he had gone down town for beer. The next day (Wednesday), I found him. He was sitting up, looked flushed, and complained of cramps in right leg. I found his pulse frequent, and trying the thermome-

ter I found the temperature 105°F. The case looked like tetanus, as the muscles of the thigh and leg were contracted, but the jaws gave no sign. I made a sanitary inspection of the surroundings and conditions, and learned that the family drank the water from a very dirty surface well: in fact, the water was putrid. The patient was given antipyrine, quinia, benzoate of sodium and morphia and whisky by the drink.

The next day the temperature was 105°F., leg and thigh swollen double in size, no further spasms of the muscles, no enlargement of the veins in the thigh discernable; the pulse felt in the anterior tibial artery of the affected extremity. The next day general conditions the same; pulse 140, temp. 105 F., delirium. Fomentations were applied to the affected limb, profuse sweating followed, and the temperature went down to 101; pulse 148.

The patient died at the end of one week from his injury, from septicæmia.

The question is how did the patient get septicæmia? On the third day, when the high temperature was discovered, I took off the dressings and examined the stump. There was no swelling, tenderness, or other sign. The wound had united; no pus was visible; the stump was clean. Clearly there was no reason to believe that the infection entered the wound at all, but that it came into the blood by some other avenue, and was probably there when the wound was received. If so, then the shock of injury diminished the general vital resistance to the septicæmic infection and caused the disease. There are certain kinds of infection giving rise to as many varieties of surgical fever; as gangrene and erysipelas, which invariably infect a wound primarily; and while other surgical fever infections, as those of pyæmia and septicæmia and pus may enter the body through the wound, I do not know of any reason why such infections may not as well make their entrance by other avenues just as the infections of other fevers do. Some of these surgical fevers are not necessary accompaniments of wounds, even when they exist, but may exist independently of wounds; and, I think from the basis of clinical history, we may formulate the relation of surgical fever to surgery as follows: The infection bears a definite relation to the vital resistance of cells and nuclei, and the vital resistance is lessened, not only by a wound and the shock of injury, but also by other means which impair the vital integrity of cells and nuclei.

I think any man will readily see from these facts and explanations that if Listerism cannot prevent surgical fever, or if surgical fever, in a large proportion of cases does not follow surgery or injuries, that these things do not prove that germitoxics will not destroy germs, nor do they prove, as many short-sighted men are now preaching, that bacteria do not cause disease. The factors of the problem of disease and its prevention, which I have mentioned, are not the only factors in the problem, as many men appear to think; but there is another factor which I will now bring up, and by the aid of which I think we will be able to explain these many apparent discrepancies between the men who use and believe in Listerism and those who do not. The factor I refer to is that there is such a thing as an immunity from disease—surgical fever and other disease as well; and that this immunity is acquired by natural selection.

One of the most misleading and fallacious articles on any medical topic in modern days appears in the *Medical and Surgical Reporter*, by Dr. H. P. Lenf, on "The Pathology of Surgical Infection and the Value of Antisepsis." The author's position is briefly that Listerism does not prevent surgical fever; that simple cleanliness—soap and water—is sufficient to prevent surgical and puerperal fever, as proven by thousands of cases; therefore his conclusion is that germs do not cause surgical or puerperal fever. Now, there are two things Dr. Lenf should do immediately; the first is to omit the soap and water in his next thousand cases, and the second is to admit the factor of immunity from disease into his calculations of the problem of surgical fever and its prevention; and probably his next report will arrest the attention of the whole world by its new light. In addition to omitting the factor of acquired immunity from disease, Dr. Lenf is obliged to assume that Listerism is a perfect method of preventing germs from causing disease, and that every person having an injury is therefore liable to have surgical fever unless prevented, in order to draw his conclusion that germs do not cause surgical fever as well as other diseases. Of course, Dr. Lenf here begs the whole question; for nobody claims that Listerism is a perfect method, or that it even approaches such; much less that it is never known to fail, or prevents surgical fever every time it is used.

The two more striking illustrations of his position employed by Dr. Lenf, are his report of four years and a half of surgical

practice in which antiseptics were carefully avoided with the result of always obtaining primary union when it was attempted, and the report of Dr. Hiram Corson, of Pennsylvania, of 3,000 cases of obstetrics with no antiseptics, and no puerperal fever—that Dr. Corson *could remember*.

These arguments or facts are brought up to disprove the germ theory, of course; but what do they prove? Certainly "primary union" was never claimed to be a primary feature in the surgery of Listerism. The oldest works on surgery tell us all about primary union, or by "first intention," and say nothing about antiseptics. Dr. H. Corson's "3,000 obstetric cases without one of puerperal fever" prove nothing, except that he was a very lucky man, and has a very limited experience in puerperal fever. Neither of these things have any possible bearing upon the germ theory in relation to its verification, nor are they facts of the least novelty in the world, admitting that Dr. Corson's statement is not partly based on a not very retentive memory. Assuming that disease germs are always present in the blood or wounds of patients, and that there is no such thing as immunity from disease, and that surgical fever must, in all cases, necessarily follow an injury, would fill the conditions ascribed by Dr. Lenf's proposition, which assumption therefore is not true; while in Dr. Corson's 3,000 cases and many other thousands like them, the only conclusion from scientific data must be that the germs of puerperal fever were prevented from coming in contact with puerperal wounds because they were not in the neighborhood, or because the vital resistance of the women was sufficient to prevent their poisonous action. Dr. Lenf also takes further liberties with the germ theory by giving a definition of antiseptics as follows: "The prevention of contact between open tissues and living disease germs," and the better to carry his points, he warns the reader in a footnote to take note of the "exact meaning of this definition." The doctor then defines the definition by stating that persons who employ this method do it to prevent the contact of germs, and then goes on to give the conditions of incised wounds which favor their union by first intention. The first of these is the "absence of all foreign matter." Dr. Lenf secures this absence by soap and water, and infers, because soap and water may be followed by union by first intention, therefore germs do not manufacture a poison.

Of course, Dr. Lenf does not deny that soap and water may

wash away living germs; but germs are not the game he is after. Of course, cleanliness must have a purpose; and if Dr. Lenf denies that germs have an influence he must give another, and hunting his paper thoroughly we find that the thing he is wishing for is the *aura* of disease and of post-mortem examinations. He seems to admit that disease can be communicated, but that if the *aura* is washed away from the physician's or other person's hands, the danger of communicating the disease is avoided. The doctor advocates rather a primitive method of cleanliness, as he advises persons to wash in a running stream, rather than in a solution of mercuric bichloride, in order to secure the requisite cleanliness from all foreign matter, which recommendation is suggestive of the Pool of Siloam, the Water of Bethesda, the Holy Well of Mecca, and the Virgin's Spring of Lourdes. Now, running streams are not always available. The doctor should state whether in such cases a garden hose would fill the bill of cleanliness.

But why should Dr. Lenf or anybody advocate even cleanliness in surgery? He reports cases in which even cleanliness was omitted, the doctor, visiting cases without even removing the *aura* from his hands, and yet carrying the disease. The dirtiest possible doctor and nurses perform surgical operations and attend obstetric cases without causing surgical or puerperal fever. Don't this fact prove that there is no such thing as surgical or puerperal fever contagions? According to Dr. Lenf's own logic, relating to the germ theory, these things certainly prove that these diseases are not communicable. Dr. Lenf proves too much. He proves not only that germs do not cause disease, but he proves that *aura* does not cause disease. He proves that not only is antisepsis unnecessary, but also proves that cleanliness is equally useless.

Dr. Lenf's whole argument, in its fallacies, errors, and assumptions, reminds me of Dr. Bastian's argument for heterogenesis; but, as I understand the situation at present, there are fewer people who doubt the germ theory of putrefaction than there are who doubt the germ theory of disease. But in order to understand the fallacies of the argument against the germ theory it is necessary to adopt the factor of immunity from disease, acquired from natural selection. By this factor we may readily explain the two classes of cases so numerous quoted by Dr. Lenf, and may understand why it is that antisepsis may be use-

less, that even cleanliness is not required, that surgical fever may not follow the absence of either, and other discrepancies of apparent character.

I do not propose to discuss the relations of natural selection to immunity from disease in this paper, but beg to refer interested readers to the file of this JOURNAL for previous attempts of mine in this direction. It is enough to say that certain people have acquired an immunity by actual conflict with disease poison and by heredity, to certain diseases. We may say that six-sevenths of the people at large have an immunity from consumption, if other things are equal, while the other one-seventh die from this disease. Vaccination and smallpox are so prevalent, and the general public are so far protected, that we no longer hear of epidemics of this disease, that cannot be prevented. Plague, typhus, sweating sickness and scurvy are particularly diseases against which the general public have acquired an immunity. The question is how do people acquire an immunity? The answer is that immunity is given cells and muscles through a variation on the food acquired by the action upon them of poison. They acquire this variation, just as they do when poisoned by arsenic, opium, or alcohol. This fact being understood, we account for the general diffusion of immunity from special disease by hereditary transmission of the variation so acquired.

Now, suppose a person, having a quarter or less immunity from septic poison, gets a wound? The surgeon may use the most approved antiseptics, which may or may not prevent surgical fever, if the immunity is of very feeble degree. Suppose the immunity is greater, then the patient, if cleanliness only is used, may not have surgical infection. Suppose, next, that the immunity is as great as it can be. In such a case there is no need of antiseptics nor of cleanliness, and primary union will follow the coaptation, after the wound is bathed with dirty rain water, a dirtier sponge and worse soap. In these cases, it is of course supposed that the infection of surgical fever is in equal relation so far as liability is concerned.

[CONCLUDED NEXT MONTH.]

[Oct.,

Editorial Department.

FRANK L. JAMES, PH. D., M. D. and A. H. OHMANN-DUMESNIL,
A. M., M. D., Editors.

FRANK M. RUMBOLD, M. D., Business Manager.

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the Postal Union \$2.25.

AID FOR CHARLESTON PHYSICIANS.

THE JOURNAL for September had gone to press when the news of the destruction of Charleston by an earthquake came over the wires. The daily press since then has been full of graphic accounts of the widespread ruin and havoc wrought by the messenger of doom, and the story need not be repeated here. Philanthropic people all over our land, and in the Mother Country, at once took measures to relieve the pressing necessities of the thousands who were rendered houseless and homeless by the awful visitation. All classes have joined in the work of mercy, and the great heart of London throbbed in unison with that of St. Louis and of San Francisco, in pity for the unfortunates. Among the givers none have done better, according to their means, than the physicians. What has thus far been done by the public at large has, however, been in the way of a general fund; and while the various societies and brotherhoods of the country have provided special funds for the sufferers affiliated with them, there has been absolutely no movement made in any part of the country for the relief of the physicians of the ruined city. These men are like their brethren elsewhere, but little given to amassing wealth.

But few of them, probably, had anything provided against so sweeping a calamity, and the consequence is that they and their families are in pressing need of assistance. Will we, who live in a more favored region, allow them to suffer without an effort to assist them? We offer no suggestions as to how action should be taken, but point out the fact that it should be done at once. The proper quarter from whence a call should emanate, is in our opinion, the St. Louis Medical Society, and we urge upon its venerable president, Dr. Gregory, to use his prerogative in the matter and call a meeting for this purpose. The JOURNAL and its editors stand ready to do everything in their power to further the good work.

Since writing the above we note with pleasure that the *New York Medical Record* has made known the fact of the want and suffering existing among our Charleston confreres, and made a stirring appeal for help. May it find a ready response in the great city of New York!

THE MECHANISM OF THE VOICE.

"The larynx" says Richerand, "resembles—a larynx." The point to this witticism, not very apparent at first, becomes clear when we consider the conceits, the theories and the similitudes that have been indulged in by physiologists of every age and country, in their efforts to explain the mechanism of articulate and musical phonation. From Galen to Helmholtz, through seventeen hundred years, one controlling idea runs,—the assimilation of the larynx to some form of musical instrument. In this effort to arrive at the rationale of the phenomena of vocalization, almost every known form of musical instrument has at one time or another been invoked as a prototype of the larynx. Not only this, but complex instruments have even been invented for purposes of comparison. In the mean time all that has been accomplished by this inductive method is the demonstration that the acoustic laws which govern the vibrations of a fiddle string or an organ-reed, also determine the movements of the vocal apparatus.

In a work by MM. Gougenheim and Lermoyez, recently published in Paris and entitled *La Physiologie de la Voix et du*

Chant (Physiology of the Voice and of Song), the authors have collated in one historical chapter, a resumé of these various comparisons, commencing with Galen (A. D. 172) and ending with the last work of Helmholtz. Galen finds in the larynx an astonishing resemblance to a flute,—the glottis being the mouth-piece and the trachea its body. It never occurred to this philosopher that it would be a queer sort of flute, indeed, in which the wind entered by the body and passed out through the mouth-piece.

Fabricius of Aquapendente (A. D. 1537) adopted this comparison of Galen's, only with this variation—he made the body of the instrument to consist, not of the trachea, but the subglottic vocal chords.

Dodart (A. D. 1700) who dabbled in theories of the mechanism of phonation, first compared the larynx to a hunter's horn, a similitude which he afterward altered to a *chassis bruyant* (literally, a noisy window sash)—the thing of all others most opposed to music. He later instituted a comparison between the sounds produced by the larynx and those *a tergo*, maintaining that the mechanism was identical in both parts of the body!

Ferrein (A. D. 1741) compared the larynx to an unknown instrument, invented by him for the occasion, and called the pneumatic dichord. In this fanciful instrument a current of air is supposed to play the rôle of the bow in causing a violin string or strings to vibrate. In works on laryngology, Ferrein is frequently cited as the man who first caused a cadaver to utter articulate sounds.

Cuvier, in 1805, concluded from observations made on animals, that the movements of the glottis correspond with those of the lips of a person playing upon the horn, or to those of the brass plate in a set of reeds (*jeux d'anches*). Dutrochet followed Cuvier in likening the larynx to an instrument of the horn kind; but Despiney substituted for the horn a trombone, and maintained that the pitch and tone of the voice was produced by the lengthening or shortening of the laryngeal tube, as is the case with the tube of the instrument used for comparison.

Magendie (1823) defended the theory of free reeds, like those of a hautboy, to which instrument he compared the larynx. In this theory Biot coincided.

Savart, in 1825, compared the larynx to the call or whistle of the bird-catchers, and was the first to assign an important vocal rôle to the ventricles of the larynx. This theory found many ad-

herents, even among adepts, until the experiments of Mueller demonstrated that a larynx deprived of the entire subglottal portion was still capable of articulate phonation.

Malgaigne, in 1831, compared the larynx to that little musical instrument called a *pratique*—the inferior vocal chords being double reeds, soft and flexible, which must be put upon the stretch before they can vibrate. Mueller coincided in this idea, proving the reed-like character of the chords by actual experiment. Longet, in 1841, adopted Savart's idea, notwithstanding Mueller's experimental reversion of it.

It was a year prior to this, or in 1840, on the return from Italy of Duprez with his wonderful *voix sombrée*, destined to have such an effect on French song-music, that Diday and Petrequin propounded their composite theory, viz; that in the bass voice the mechanism of the larynx resembles that of a horn; in the natural voice that of a hautboy, and in falsetto that of a flute.

From this date until 1861, almost every writer on the subject adopted the reed or hautboy theory, but in this year (1861) Bataille and Moura-Bourouillou, independently, set on foot investigations to test the question whether phonation is produced by the vibration of air acting upon the glottis or to the vibrations of the glottis itself. The question thus propounded was taken up in the true scientific spirit by Fournié (1886), Mandi, and Helmholtz (1872), and has been the subject of continuous experimentation ever since.

To this resumé of our authors, we may add that while some light has been thrown upon the subject, the difficulties in the way of a correct solution of the problem have been very greatly increased by the discoveries of Reis, Bell, Edison and others, in the direction of the reproduction of articulate sounds by purely mechanical means of the simplest description. The phonograph of Edison, particularly, may be mentioned in this connection. In the meantime the preponderance of evidence at present points to the conclusion that voice is the result of the vibration of the inferior vocal chords and not of the 'glottic air.'

In conclusion we would remark that it is strange that in their search for instruments of comparison the older physiologists should have neglected the æolian harp, a combined wind and string instrument, known from the remotest antiquity.

THE SURGEON GENERAL OF THE ARMY.

Since the retirement of Surgeon General Crane, Dr. J. H. Baxter has been acting as Surgeon General, and we are quite sure that no man ever filled the position with greater satisfaction to those whom business has brought into contact with him. Dr. Baxter is a man in the prime of life, a skillful surgeon and thoroughly educated physician. With these qualifications he combines an aptitude for business and an attention to detail that eminently fit him for the arduous position of head of the Medical Department of the War Office. It is generally believed that the President will recognize this fitness, and with his usual common sense, appoint Dr. Baxter the successor of Dr. Crane. At any rate, the ST. LOUIS MEDICAL AND SURGICAL JOURNAL hopes he will do so.

According to *el Siglo Medico*, Dr. Meyrignac of Panama, is busy inoculating the employees of the Canal Company for yellow fever. He employs the sediment of the urine of yellow fever patients, which is said to contain the zoöspores of the *peronospora lutea*. He dissolves this sediment in distilled water and injects it. Of three hundred Mexicans injected before the epidemic of 1884, not one has died. The inoculation is generally followed by a slight attack.

Daniels' *Texas Medical Journal* sympathizes with the poor baby and considers its lot as not a happy one, judging from what authors enjoin in regard to it. For instance, one writer says: "If the baby does not thrive on fresh milk it should be boiled." Another one, speaking of a new nursing bottle, says: "When the baby has done sucking it should be unscrewed and hung up." Daniels says: that in the forthcoming transactions of the State Medical Association there will be an article in which the author, speaking of a sick child says: "The stomach was very irritable and it kept twitching its mouth."

1886.]

Department of Microscopy

CONDUCTED BY

FRANK L. JAMES, Ph. D., M. D., President of the St. Louis Society
of Microscopists, of St. Louis, Mo.

THE USE OF NITRITE OF AMYL FOR FINE INJECTIONS.*—By B. L.
OVIATT and E. H. SARGENT, of Cornell University.

Under this head let us first consider the essentials of a fine injection. There are two that must be kept ever in mind; first to have the mass so fine that the smallest vessels may be entered and filled. Second that these fine vessels be relaxed as much as possible.

The areas to be injected should be comparatively small, for the following reasons: That there may be the most even pressure throughout the whole area; that the pressure can be better controlled, and that there may be no great and unnecessary waste of materials.

But the most important feature is to have capillaries relaxed and open to their fullest extent, and it is for this latter purpose that nitrite of amyl is used.

Nitrite of amyl ($C_2H_{11}NO_2$), formed by passing nitrous fumes into amyl alcohol, is a light yellow liquid with a peculiar penetrating and stupifying odor. Its vapor when inhaled causes a flushing of the face and quickening of the pulse, from the increased area of the blood vessels, which arises from the relaxation of the fibres of the involuntary muscles in the wall of the blood vessels. Continued breathing of these fumes will cause insensibility and even death. It will be seen then, that the property which concerns us is that of invariably relaxing involuntary muscles.

*Read at the Chautauqua meeting of the American Society of Microscopists.

As death from nitrite of amyl, alone, must be painful, it should always be given in connection with ether. This may be done in several ways, among which are the following. First method: A small amount may be mixed with the ether and this mixture poured into the anæsthetising box in which the animal is killed. After coming perfectly under the influence of the ether a sponge or cloth moistened with pure nitrite may be placed over the animal's nose until it is quite dead; it is not to be recommended.

Second method: The animal may be made perfectly unconscious with ether alone and then the nitrite may be given either by pouring on a sponge and placing over the nose as before, or the animal may be taken from the box and the nitrite given by putting the sponge on the animal's nose and then wrapping the whole head in sheet rubber or enamel cloth.

What would probably be still better would be to inject a small amount of nitrite, in normal salt solution, directly into the vessels after the animal has been killed by either of the above methods. In all cases it is well to add a little nitrite to the mass just before using.

The relaxing power of this compound is such that the great arteries will often be found collapsed.

METHOD OF SECTIONING CARTILAGE FRESH, by PARTIAL EMBEDDING: *—By B. L. OVIATT, of Cornell University.

I think there is no one who has tried the method of freehand sectioning who has not felt the need of some more accurate and less difficult method.

I wish to note a method which I have applied to sectioning cartilage.

The bone to which the cartilage is attached is cut two or three centimeters from the joint from which the cartilage is to be obtained. The well of the microtome is then filled with paraffine to within about one centimeter of the top, and as soon as it begins to turn white from cooling, the bone is inserted until the cartilage is in the plane of the microtome or a little below it. While the paraffine is cooling the cartilage is prevented from drying by placing

*Read at the Chautauqua meeting of the American Society of Microscopists.

on it a little cotton wet with artificial serum or normal salt solution.

By this method it is possible to obtain sections of uniform thickness, also much more rapidly than by the old method.

I have also applied this method to sectioning injected tissue with the precaution to cut very slowly and with a drawing motion, and at the same time keep the tissue and knife wet with twenty-five per cent. alcohol.

At the histological laboratory of Cornell University we had formerly been seriously troubled to obtain sections of cartilage in which the cells had not shrunk away from the matrix; and the only thing which has been found efficient in preventing this is the method used by Ranvier and mentioned by him on page 279 of his *Traité Technique d'Histologie*, of dropping the sections immediately into a saturated solution of picric acid. Professor Gage found by experimenting that the following mixture was even more effective:

Picric acid	7.5 Grns.
Alcohol 95 per cent.	250 c. c.
Water.....	250 c. c.

By the use of picric acid the shrinking of the cells is entirely prevented and when mounted still appear as perfect as in life.

After twenty-four hours the sections are transferred to water and allowed to remain six or better twelve hours, and then may be stained in any desired manner.

If they do not take the stain readily they may be left even longer in water.

Return those Slides and Books!—Mr. E. H. Griffith, of Fairport, N. Y., the originator and for several years past the superintendent of the Working Session of the American Society of Microscopists is very much chagrined at a mistake which occurred at Chautauqua and which cost him and the Society several valuable books, slides and instruments. Having received from California some microscopical material for distribution he announced the fact in open session and told all who desired specimens to come to his table and help themselves. Quite a number of persons availed themselves of the offer and helped themselves not only to the unmounted material but to a large number of rare and

costly mounted slides belonging to the Society and some valuable books which chanced to be on the same table. Similarly Mr. Griffith's offer to loan any instrument on his table to workers in the session was taken to mean that the parties could keep what they borrowed—the result being a nett loss of four new and costly Griffith turn-tables. No doubt those who took the books and slides did so under a misunderstanding of Mr. G.'s words and they will promptly make reparation. Those who kept the turn-tables can scarcely be judged so leniently. Still it is possible that they too misunderstood the offer. At any rate, prompt reparation should be made. If it is not done the matter should be looked into by the Society and an example made of the persons who so abuse the privileges of membership. The 'nipping' of fine slides has become entirely too frequent to be pleasant to those who have to stand the loss. The writer's cabinet has suffered a greater or less depletion from this source at every meeting that he has attended, and the 'nippers' must henceforth be on their good behavior or exposure will most certainly follow.

Coles' Studies.—We have received from the publishers, Messrs Hammond & Co., of 136 Edmund St., Birmingham, Eng., the four first slides and fasciculæ of the now well-known Studies in Microscopical Science of Mr. Arthur Cole, F. R. M. S. These studies progress under four separate headings, viz; botanical histology, animal histology, pathological histology and popular microscopical studies. Each set consists of twelve slides, mounted in the style which has made Cole's name famous, and each of which is accompanied by a letter press description of the histological features of the slide, illustrated with a photomicrograph or good lithographic picture of the microscopical appearances. To the physician who uses the microscope in his daily practice, the pathological series is invaluable, since it furnishes him typical plates with which he can make ocular comparison of those abnormalities which are constantly occurring in his work. The price of each set of twelve slides and fasciculæ is \$6 per annum, or \$20 per annum when the entire series is taken. Messrs Queen & Co., of Philadelphia, are the American agents.

Mr. M. K. Cunningham of Mobile, who with Dr. Taylor of that city has been doing some good work on the diatoms of Mobile Bay, has been taking in the festivities of St. Louis. The number of distomaceae from this locality already found and named is, we are informed by Mr. Cunningham, something enormous. The exact figures are forgotten, but they are in the neighborhood of two hundred and fifty.

The Meibomian Glands in the Cat.—The following is a note on this subject read by E. H. Sargent, of Cornell University, at the Chautauqua meeting of the American Society of Microscopist. "The Meibomian Glands are small glands situated in the substance of the eyelids and opening, each gland by its own duct, on the free margin of the lid. They secrete a thick oily substance, formed from epithelial cells which have undergone fatty degeneration, which serves to prevent the lids from sticking together. The form of each gland is an elongated egg shape, with the large end nearest the margin of the lid. Each is made up of a number of chambers or acini which open directly into the wide central cavity which extends nearly the whole length of the gland. This cavity is very large for the size of the gland, and has its greatest diameter near the open end of the gland. The walls surrounding this cavity vary in thickness somewhat inversely as the diameter of the cavity surrounded, being thick at the ends and thinnest where the diameter of the cavity is greatest. The duct which leads from this cavity to the margin of the lid is quite short and in many cases has a constriction around it near the end which opens into the central cavity, seemingly to serve as a valve. These ducts open in slight pits on the margin of the lid, and in those cases where pigment is present it will be found to extend a short distance down the sides of the duct from its mouth. In some cases this duct is so very short as to become practically obliterated, and the opening is then a simple round hole opening directly into the central cavity of the gland."

MICROSCOPICAL TECHNOLOGY.

XIII. MOUNTING IN BALSAMIC MEDIA.

§. LXVII. The student who has followed this series will remember that when we finished section cutting our sections were left in a watery medium, viz; plain water, alcohol and water or glycerin and water, as the case happened to be. Since the sections are therefore permeated with a medium which will not mingle with any of the balsamic mounting media, our first care must be to get rid of it, and to supplant it with a fluid that is soluble in the balsamic medium of which we intend to make use. This process is called *dehydration*, and since there is no known fluid, that can be used for this purpose, which is at once soluble in water and in the balsams, the operation must be performed in two or more stages, or by the aid of two intermediaries, instead of one, viz;

(a) Alcohol, soluble in water and essential oils;

(b) An essential oil, soluble in alcohol and in the balsamic medium.

§. LXVIII. THE MANIPULATIONS are sufficiently simple. The section, or object to be mounted, is removed from the watery medium in which it has hitherto rested and transferred to a watch-glass or other vessel containing alcohol of 95 per cent. After letting it remain in this bath long enough for the alcohol to permeate the tissues, the fluid is drained off and the vessel filled with absolute alcohol. In order that the strength of the alcohol shall not be perceptibly reduced by the aqueous matter extracted from the material introduced therein, the volume of the fluid should be large in proportion to that of the material. When the sections are large or comparatively bulky, it is better that they pass through three or even four washings with alcohol before being transferred to the essential oil. The length of time requisite to this end depends upon the nature of the material, but need rarely occupy more than five or ten minutes.

§. LXIX. When the object is permeated with alcohol it should be thoroughly drained and then placed in some essential oil, which as remarked above, is equally soluble in alcohol and the balsamic mounting medium. One of the best known oils and that

most frequently used for this purpose, is oil of cloves, although there are a number equally as good and some of them free from the objectionable characteristics of clove oil (such as the shriveling of tissues, pungency of odor, etc). Among the agents which I have successfully used are oil of cade, oil of turpentine, creosote and carbolic acid. Whatever oil be used the object must be left in it until thoroughly permeated, a fact of which the student must assure himself by examining his specimen under the microscope before its final removal into the mounting medium.

§. LXX. When at length the alcohol is completely supplanted, the last step may be taken, and the object placed into the resinous medium in which it is to be permanently mounted. For this purpose I keep on hand a solution of balsam or damar in benzol or chloroform, made much thinner than the balsam used for mounting, and into this the specimens are transferred from the essential oil and left to soak until ready to be transferred to the slide.

§. LXXI. IN MOUNTING WITH BALSAM the operator has the choice of mounting with or without a cell wall. If the object be very thin the latter method is preferable, inasmuch as it requires less manipulation; but since the balsamic mounting medium is liable to shrink very considerably in the process of drying and hardening, I would not advise the student to dispense with the cell-wall whenever the object to be mounted is delicate and friable (as, for instance, the delicate frustules of the larger diatoms). In this method of mounting the manipulations are very simple. The object is removed from the thinner balsamic solution (as little of which as possible should be carried with it) and is arranged in the position which it is to occupy upon the slide. A drop of the mounting balsam is next placed upon the centre of a cover-glass which has previously been cleaned and slightly warmed. With a quick movement the cover-glass is turned over and applied to the object, being carried to its place with a very gentle pressure. The slide is now placed on its edge in a warm place and allowed to stand until sufficiently hardened for subsequent manipulation. Air bubbles, the source of so much trouble in other kinds of mounting, soon dispose of themselves by gradually making their way to the edges and there breaking.

§. LXXII. MOUNTING IN BALSAM WITH A CELL.—The method of spinning the cell wall has already been described, and the student has been cautioned as to the choice of a cell material.

If any of the balsamic cements (like white zinc, asphalt, etc) have been used for the cell wall, it will be necessary to protect it thoroughly by a coating of some aqueous cement (such as gelatin or arabicin) applied with a camels hair pencil. If the arabicin cement (described in § LVI, e.) be used for the cell wall no further precautions are necessary and the method of procedure is identical with that described in the foregoing paragraph. The object is arranged within the ring, the balsam applied to the cover-glass and the latter deftly turned and shoved home.

For applying the balsam to the cover-glass or object nothing is better than a bit of glass tubing drawn out to a somewhat coarse point, or a little medicine dropper with a vulcanized bulb.

The beginner is prone to get too much balsam on his slide, an error which causes some loss of time, to say nothing of its being wasteful and slovenly. It is better, however, for him to err in this direction than in the opposite, or in getting too little. In the former case the excess may easily be scraped off after it is dry, while in the latter, considerable manipulation is sometimes necessary to remedy the default. The best plan is to place a drop of balsam at the edge of the cover-glass on the side opposite to the deficit. A needle is then inserted under the cover-glass and the latter slightly raised. As it raises the added balsam is drawn under it and a little manoeuvring suffices to distribute the fluid evenly over the field.

§. LXXIII. HARD BALSAM was formerly much used for mounting, but of late it has given way, in a very large measure, to balsam dissolved in benzol or chloroform. There are, however, instances in which it may be used advantageously, and when such is the case it is softened by the application of gentle heat, applied by means of a waterbath. The slides and cover-glasses are also warmed. The manipulations otherwise are the same as in mounting with soft balsam.

When, on the contrary, the natural balsam, or balsam from which the turpentine has not been thoroughly eliminated, is used, the process of drying becomes a very tedious one and may occupy many weeks or even months. It may be hastened by the application of artificial heat and a number of devices have been contrived for this purpose. The simplest and best is a rack, made of tin or wood, in which the slides may be packed and hung up in proximity to the domestic heating apparatus, but not near enough to the fire to injure the specimens.

§. LXXIV. FINISHING BALSAM MOUNTS.—When the surplus balsam around the edges of the cover-glass has become hard and brittle the slides are ready for finishing. The first step is the removal of this surplus, by scraping it away with a pen knife or other suitable instrument. Care must be taken, in doing this not to get the point of the blade under the edges of the cover-glass, or in any way to disturb the same; for while the exuded resin may be dry and hard, that which is under the cover is probably still soft and fluid. For the same reason the operator must be careful about making pressure on the cover-glass, as in this manner a portion of the soft balsam may be forced out and its place taken, too frequently, by an air bubble which it is almost impossible to get rid of. If such an accident should happen it may sometimes be remedied by proceeding as suggested in § LXXII; but before fresh balsam is added in such a case, the slide in that neighborhood must be made as clean as possible, since the balsam in entering will carry along with it any particles of dust or dirt with which it may come in contact. After refilling, the slide must be again laid away to recommence the process of hardening. After scraping away as much of the dry balsam etc. as possible, place the slide on the turn-table and spin a ring of arabicin or gelatin cement around the edge of the cover-glass. Let dry, and as soon as this occurs, clean the slides thoroughly with a linen rag moistened with benzol or turpentine. The ring of arabicin prevents the cleansing fluid from invading the cell. After the entire slide and the top of the cover-glass are cleaned, the ring of arabicin cement may be rinsed off with clear water and the slide labeled and put away, or it may be finished as hereafter described in the manipulation of aqueous mounts.

We have noticed that our esteemed South American contemporary the *Annales del Circulo Médico Argentino*, in its list of exchanges which it publishes, graciously places St. Louis and New York in France, Europe. In the same journal, Canada is placed in the United States as also *Nuevo-York*.

The British Medical Association has just completed its Fifty-Fourth Annual Meeting, at Brighton. The number of good papers presented this year was not very great.

Department of Dermatology and Syphilology.

CONDUCTED BY

A. H. OHMANN-DUMESNIL, A. M., M. D., of St. Louis.

Osteoma Cutis.—A case of this exceedingly rare condition is described by F. Salzer in a late number of the *Archiv fuer Klinische Chirurgie*. A portion of the scalp, keloidal in nature, was removed from a man aged twenty-eight, the excised portion being in the neighborhood of the coronal suture. This growth had developed in about four years from a small tubercle and without any appreciable cause. The formation was in no way connected with the pericranium; nevertheless, it had a bony feel and seemed to lie spread in a thin plate in the cutis vera. Actually, it consisted of a very porous piece of bone, which was perforated by a few hairs, and there were also sebaceous and sweat glands passing through it and opening upon the surface of the skin. There were also found degenerated sebaceous glands and ducts enclosed in the bone. Beneath the bone could be found in all directions hair bulbs and the tubuli of sweat glands, which gave on all sides club shaped prolongations. This case is the more remarkable from the fact that a heteroplastic growth of the bone took place in so young a subject and besides there existed neither cicatricial tissue nor any malignant growth in the implicated skin. The case is perhaps an unique one and the care taken in its morphological examination does not leave any doubt as to the accuracy of the observation.

Diagrams for Skin Diseases.—Dr. F. J. Pick, of Prague, says, in the *Vierteljahres-schrift fuer Dermatologie and Syphilis*, that the study of the localization of pathological changes upon the skin is one of the most important factors for the proper appreciation of these processes and also for a proper understanding of them. This is useful not only to confirm the conclusions drawn

during late years, but also to aid in the determination of the nervous origin of many diseases of the skin. He considers that such general expressions as the breast, flexor surface, etc., are too crude and that substituting the graphic method for the descriptive is a great improvement. These diagrams for localization give a front and back view of the body and are divided into regions by means of black lines and by red lines are indicated the areas of nerve distribution of the cutaneous branches. He further suggests that, by the aid of differently colored pencils to fill in with, very graphic representations can be given, as shown by the work of his clinical assistants. The great advantage claimed for this method is its rapidity and hence it is particularly useful for clinics. I have used a graphic method similar to this and have found it very useful, but a much better and more exact method, although somewhat more costly, is the photographic. Since the introduction of dry plates, which are comparatively cheap, a correct image can be taken and the work done much more rapidly than by the graphic method. The negatives can be afterwards developed at leisure and any number of photographs printed which give not only the area affected but a good representation of the lesions.

Keratosis Follicularis.—Dr. Prince A. Morrow details the clinical history and microscopical appearances of a case of keratosis follicularis, associated with fissuring of the tongue and leucoplakia buccalis in the *Journal of Cutaneous and Venereal Diseases*. The patient, a sailor, aged twenty-one, about five years ago, observed a number of blackish protruding points upon the backs of his hands and, soon afterwards, on other portions of the body. When he applied for treatment there was an implication of almost the entire follicular apparatus of the skin in a morbid process which had resulted in a dilation and projection of the excretory ducts, and the presence of comedo-like plugs, which were altered in character and exaggerated in development. Examination of the contents of the follicles showed a deficiency of fatty matter and a marked increase in the corneous element. They were dry, hard, and of horny consistence. The cause of the cornification was probably some structural peculiarity or lesion of the sebaceous glands, permitting a premature exfoliation of the epithelium before fatty transformation of the cells was complete and associated with this probably atony of the glands or deficiency of excretory power. The sebaceous plugs, resulting from this, were of

the nature of comedos, but more exaggerated and generalized. Lesser describes this rare disease under the name of ichthyosis follicularis. In addition to the cutaneous symptoms, it was observed that the mucous membrane on the soft palate and roof of the mouth was studded with innumerable minute brownish spots, rather depressed in appearance, although feeling perfectly smooth. The tongue was large, somewhat thickened and flabby, and rough to the touch. The surface was white and pasty, and fissured. No history of syphilis could be made out.

A Parasite in Scrotal Concretions.—Dr. V. Galippe writes a short note, to *La France Médicale*, in which he states that there are found, in certain persons, upon the scrotum a number of small roundish bodies which project slightly above the level of the skin and present to the feel the impression of calcareous concretions. By an incision they can be easily extracted together with their envelope and then present a bluish color. They are disc-shaped, smooth and with rounded edges. These concretions contain cholesterin crystals and seem to have developed at the expense of the sebaceous glands. The younger the concretion the more soft. Cultivations of these concretions in previously sterilized liquids have given rise to a micro-organism which can be isolated and cultivated. Dr. Galippe brings this observation forward as additional proof in favor of his theory, respecting the formation of calculi in the human economy, which he has already published.

Tuberculosis of the Skin by Direct Inoculation.—Tuberculosis of the skin is one of the subjects of dermatology which of late has been receiving a considerable amount of attention, and the fact that it is comparatively easily inoculable, and easily derived from the products of tuberculous patients, should make all who have to come into contact with these sources of infection, more careful to avoid contracting local and possibly general tuberculosis. Paul Raymond details four cases in *La France Médicale* citing in addition quite a number which have already been published by various authors. Clinical experience had pointed out the possibility of giving rise to tuberculosis of the skin by inoculation and microscopic examination to-day has established the fact beyond the possibility of a doubt by finding the characteristic bacillus of tuberculosis present in these *tuberculomata*. From the clinical histories of the various cases observed it seems that an

interval of from eight days to two months is necessary for the complete development of the anatomical tubercle. The primary wound would hardly take on a peculiar aspect before the eighth to the fifteenth day.

Diffuse Hypertrophic Syphiloma of the Face.—Dr. Bidon gives this name, in his thesis, to a rather rare affection generally described as syphilitic leontiasis (*Journal de Médecine et de Chirurgie Pratiques*). This hypertrophic syphiloma, which may be considered a tertiary lesion, has two modes of evolution: one is rapid and the other is slow. In the first case, enormous deformity of the face is produced in a few days, the lesion beginning in the lips or nose. Generally, however, the process is slow, and tubercles are observed forming, uniting and becoming fused into one mass. When the affection has reached its limit, the face is considerably tumefied, the features are distorted and extremely hard and marked, the cheeks very prominent, hiding the nose in the furrow left between them. The face is divided by furrows of great depth and elevations which seem to be so many added pieces. It is then that the disease may be mistaken for elephantiasis. The swelling of the eyelids and nose is considerable, but it is in the lips that the deformity is most characteristic. The hypertrophied upper lip becomes prominent and projects forward; it is divided into lobules by a number of small fissures and the lower lip presents about the same appearance. The ears occasionally present themselves three or four times their normal size. Besides this, the intra-buccal organs are either separately or jointly affected. The consistence of these lesions is remarkable. It is an œdema, sometimes soft, at other times hard. When the parts are taken between the fingers, a specific, elastic resistance is experienced. There are no subjective symptoms and it never terminates in ulceration or suppuration. I had occasion to see a very well-marked case of this kind about a year ago. The patient, a young man, had been kept for a long time on chaulmoogra oil, his physician supposing the case to be elephantiasis. He improved considerably on antisyphilitic treatment, but passed out of sight.

Erythanthema Syphiliticum.—At the late meeting of the American Dermatological Association, Dr. E. B. Bronson read a

very interesting paper upon the above subject, his attention having been drawn to the subject by a peculiar case of syphilis in which lesions, regarded as foreign to the generally accepted list of syphilodermata, made their appearance. A study of the subject has led Dr. Bronson to the following conclusions or rather inferences, as he terms them: Certain forms of erythanthemata arising in the course of syphilis may be regarded as products of the latter disease; more especially when they coincide with, or are directly followed by an outbreak of typical syphilitic manifestations. In view of their resemblance to simple angioneurotic or neuritic affections of the skin, it is probable that they also correspond to the latter in their mode of origin; and, while doubtless due primarily to the syphilis, they are not pathognomonic of the latter disease, and probably not equivalent etiologically to true syphilodermata. Finally, the syphilitic erythanthemata may, through reflex irritation, and in the same manner as a local traumatism become the seat of a characteristic syphilitic infiltration.

Syphilis of the Placenta.—In a thesis written by Dr. A. Gascard, the deductions made may be summarized as follows (*Jour. Cut. and Ven. Dis.*): The existence of placental lesions, during the course of syphilis, is undeniable, but they are by no means constant. Evidence of hypertrophy of the villositities with fibrous degeneration of the connective stroma and obliteration of the vessels may be found, coincident with certain patches of fatty degeneration. In these cases where pregnancy does not come to full term, lesions of the placenta and of its membranes may be formed, more or less pronounced, accordingly as the delivery has taken place near the regular term. Proper specific treatment may result in a fœtus carried, born at full term and living, in women who have previous to that time had a number of successive abortions.

Prickly Heat.—I have tried everything that a fat man, suffering the tortures of sheol, could think of, and got no relief until I used a two per cent. aqueous solution of sulphate of copper, applied with a bit of soft sponge and allowed to dry on the skin. It dries up the eruption in from one to three days. The wash should be applied morning and night. F. L. J.

SHORT TALKS ON DERMATOLOGY.

Under the above Caption the Editor of this Department proposes, in each number of the JOURNAL, to give a short practical synopsis of the principal points attaching to the diagnosis and treatment of some skin disease. No attempt will be made to follow any classification, but diseases will be taken up as they suggest themselves.

XII. Sycosis.

This disease known also as sycosis non-parasitica and mentagra is a chronic disease of the skin generally limited to the hairy portions of the face, and consequently almost exclusively found in men. It usually begins as a small red macula surrounding a hair. This becomes very slightly developed and in a short time a pustule is developed which pustule is pierced by a hair. It will be found that the hair is very easily extracted at this stage and when taken out a small, white cylinder of epithelium will be found adherent to it—the root-sheath. The subjective sensations accompanying this are a deep-seated pain, with a burning, stinging sensation. If allowed to go on untreated the whole surface of the affected skin becomes red, the skin itself thickens and the pustules keep forming and discharging their contents. When the case is aggravated the skin becomes, in a certain measure, fungoid. The parts affected are such as are furnished with thick hair and the upper lip in men is the favorite site of sycosis. The beard is frequently attacked, as are also the eyelashes, eyebrows, pubes and axillæ. The scalp is very rarely the seat of the disease.

The cause of sycosis is not known; it is certainly not contagious and shaving, as well as not shaving, does not contribute to cause its appearance. It would seem, however, that in certain cases irritation and eczema have acted as etiological factors in this disease.

The differential diagnosis of sycosis is a comparatively easy matter. The other diseases for which it might be possibly mistaken are lupus, eczema, parasitic sycosis or syphilis. To differentiate it from lupus is a very easy thing, for in the latter we have the early formation of nodules, accompanied by more or less ulceration. Besides this the sites of predilection are rather those portions which are not hairy and if it has existed any length of

time the peculiar scars of lupus are apparent. From eczema of the face or beard it may be distinguished by the fact that the hairs in eczema are firmly set in their follicles and traction exercised upon them produces pain. In sycosis, on the contrary traction produces no pain, but pressing the hair downward in its follicle does. Parasitic sycosis or as it is better known trichophytosis barbæ or barber's itch is distinguished from sycosis in the fact that in the former we have the formation of lumpy masses, nodules and large pustules. The hairs break off, are more or less lustreless and as in eczema the burning and pain are not so prominent as in sycosis. In barber's itch, microscopic examination of the affected hair will readily demonstrate the parasite. Syphilis will not be readily confounded with sycosis if the history of the case is inquired into, and if the remains of the former eruptions be looked for, in the absence of such confirmatory proof, the presence of the syphilitic lesions will be enough to solve the question, as they will be neither limited to the hairy portions of the face nor will the individual lesions be limited strictly to the hair follicles.

The pathology of this disease is, in one respect, very simple. Researches made into the microscopical anatomy of this disease have demonstrated the fact, that it is simply a perifolliculitis. The inflammation then extends to the adjacent cutaneous structures and produces the appearances already described.

The treatment of this disease is principally local. Some authors contend that general treatment should be given, according to the indications presented. The functions should be regulated and the system at large put in as good a condition as possible. Others assert that the internal administration of arsenic is of value, but this is doubtful. Some also contend that mercury will greatly assist in the cure of sycosis. I am inclined to believe with Veiel that internal remedies exert but little, if any influence, and are for the main part, ineffectual. The local treatment is that upon which most reliance can be placed. In the first place, when the disease is observed it will be found that pustules exist and the first thing to do is to epilate. Too much stress can not be laid upon this point. The operation is a painless one and, besides giving free vent to the pus, it aids in removing a certain amount of irritation. This is to be followed by daily shaving of the part. This operation is at first extremely painful but in a few

days it is easily tolerated and the patient will find that if he leaves the beard grow for a few days, it becomes a source of irritation and will resume shaving of his own accord.

If the disease is in its acute stage, mild applications will be indicated. The diachylon ointment, a very weak tannin ointment or some similar preparation will act very nicely. If, however, the condition is chronic, stimulation must be employed. A good stimulating ointment is one composed of one part of pyrogallie acid to fifty of alcohol, to be applied in the morning. At night some sulphur paste is to be employed. I have also found that oleate of mercury the strength of ten to twenty per cent. is a very good stimulant, using diachylon or a rather weak sulphur ointment at night.

If any small abscesses exist, they should be opened. If tubercles exist, especially of the flat variety, they should be fully scarified or as some prefer, scraped with a sharp spoon.

Sycosis of the eyelashes is quite readily amenable to the simple treatment of epilation followed by the application of an ointment of yellow precipitate of the strength of one part to fifty of vaseline.

The prognosis of sycosis, as far as ultimate cure is regarded, is good. The disease is curable but rebellious and chronic. I have seen a case of twenty-seven years' standing. Moreover, relapses are not rare, but persistent treatment will ultimately be rewarded by a cure.

Hog English.—The following specimen of this form of the vernacular is from the pages of our valued contemporary, the *Kansas City Medical Index*.

“If the ST. LOUIS MEDICAL AND SURGICAL JOURNAL had less of Frank James's microscope and more of medicine, it would be a much better journal.”

Thanks! While, for our part, we cannot imagine what anybody wants with a better journal than the ST. LOUIS MEDICAL AND SURGICAL, just as it is, such disinterested advice,—so like that of Aaron to Moses, merits some return at our hands. We would suggest therefore for the improvement of the *Index*, the omission of everything except the ads.

[Oct.,

Department of Diseases of the Eye and Ear.

CONDUCTED BY

A. D. WILLIAMS, M. D., OF ST. LOUIS.

Arterial Hæmorrhage following Enucleation.—Meyer (in the Report for 1885, of the Heidelberg Ophthalmological Society) relates that having had occasion to remove an eye from an unhealthy girl of three years of age, when the optic nerve was cut a profuse arterial hæmorrhage followed and could not be checked until he ligated the ophthalmic artery. The child died soon afterward, and a post-mortem revealed an abnormal condition of the orbital blood vessels, thus accounting¹ for the very unusual hæmorrhage. So far as I can now remember this case is unique in ophthalmological literature.

In the same report Mr. Richardson Cross relates the particulars of a case of orbital tumor which developed suddenly and necessitated the removal of the eye and entire contents of the orbit. The hæmorrhage which ensued was very profuse. Pressure upon the corresponding carotid only partially checked it and the orbit was tamponned with similar results. The carotid was thereupon ligated and hæmorrhage ceased. The tumor on examination was not considered malignant.

The writer recently operated on an orbital tumor, removing the eye and entire contents of the orbit. The tumor proved to be melanotic and filled the entire space behind the ball, so that the orbit had to be completely stripped of everything. The hæmorrhage from the apex of the orbit was very profuse but the direct application of chromic acid to the bleeding vessels at once and permanently stopped it. I will take occasion to say in this connection that chromic acid, when it can be applied directly to the bleeding parts, is very effectual in checking alarming hæmorrhage.

Aural Exostoses Drilled away by the Dental Engine.—Heretofore it has been thought best to let the hard ivorylike exostoses of the external meatus alone, on account of the difficulty and danger of trying to remove them. I have turned away several

such cases. More recently I have about concluded to operate on these exostoses by drilling several parallel holes through the base of each one so it could be detached and removed. Geo. P. Field, M. R. C. S., (in *British Med. Journal*, Feb. '86) reports fifteen successful operations that he had made on these aural exostoses. The plan of operating is very simple. He protects the other parts of the meatus by a spoon-like metallic plate of proper size; then with a dental engine he drills the exostosis away, saving as much of the skin as possible. This certainly is a good plan for removing these bony growths heretofore considered incurable.

Deafness Cured by Removing Tonsils.—A few days since a little girl eleven years old called, complaining of noises and deafness in the left ear. Everything in the outer ear was normal. In the throat there was chronic pharyngitis and a very large tonsil on the left side, completely filling up the soft palate and pushing the left portion of the latter upwards against the mouth of the eustachian tube. The diagnosis was at once made that the noises and deafness in the left ear were caused by the enlarged tonsil. I excised the tonsil and in a few days all trouble in the ear had ceased.

Some years since a boy about twelve years old had noises in both ears and was deaf in both. Externally the ears were normal. In the throat there was chronic pharyngitis and the tonsils were enormously enlarged. Diagnosis: The hypertrophied tonsils cause the noises and deafness, by pressing up against and closing the mouths of the eustachian tubes. I amputated one tonsil with prompt relief to the corresponding ear. In a few days I excised the other tonsil with equally prompt relief to the other ear. All enlarged tonsils do not cause noises and deafness. They must be unusually large and press up against and close the mouths of the tubes before they can directly involve the drums.

The Best way to "Circumcise" the Cornea.—In cases of *persistent pannus* it occasionally becomes necessary to "circumcise" the cornea. This has heretofore been done by excising a narrow strip of conjunctiva, close to and clear around the margin. The object of this operation is to cut off the conjunctival blood vessels from the cornea and thus cure the pannus. A better, easier and more effectual way to do this operation is to burn a narrow strip of

conjunctiva close around the margin of the cornea with the galvano-cautery. The resulting cicatrix will more effectually obliterate the blood vessels.

In doing the operation the cautery must be touched to the conjunctiva *very lightly* but continuously. In cases where a tuft of blood vessels passes into the cornea, causing partial pannus, and persist, they can be easily destroyed by burning across them in the conjunctiva close to the cornea. I have frequently cut across them and even excised portions, but they often re-develop.

A Tumor of the Cornea removed by Galvano-Cautery.

—A man about sixty-five years old had had a flesh-like tumor on the upper and inner margin of the cornea for over twelve months. The growth was regular but comparatively slow. When I first saw it, a few days since, it covered about one-fourth of the corneal surface, upwards and inwards. The tumor was a flesh color and considerably raised above the surface, but was not nodulated—the surface being smooth. It had a rather hard and horny feeling when touched with the probe. It grew from the corneal substance, was firmly attached to it, and there were a few enlarged blood vessels running into the mass from the adjacent conjunctiva. The diagnosis was a “fleshy excrescence, non-malignant.” In the inner cornea of the affected eye as well as the other, is a well marked pterygium, but I do not think that had anything to do with the development of the tumor.

As it would be very difficult to separate the tumor from the cornea with the knife, I determined to burn it off with the galvano-cautery. Having cocaineized the eye, I *lightly* touched the glowing loop to the surface of the tumor, first at one part, then at another, until the entire mass of the growth was completely destroyed. The operation caused scarcely any pain and there was almost no reaction. The burnt surface healed very rapidly, making a good result.

The cautery beats the knife in this kind of an operation. Care must be taken not to burn through the cornea. That could easily happen, as the glowing wire goes through the flesh like a hot wire through snow.

Medical Progress.

THERAPEUTICS.

Cacur is the name of a small, bitter fruit used by the Kaffirs as an emetic. Prof. Oliver states that the plant is one of the Cucurbitaceæ, probably the *cucumis myriocarpus*. Examination of the fruit by Mr. Armstrong Atkinson (published in the *Edinburgh Medical Journal*) shows it to be a cholagogue purgative as well as emetic. It grows very plentifully everywhere in South Africa, and may become a valuable addition to therapeutics.

Hyoscine hydrobromate.—Drs. Francis L. and John R. Haynes of Philadelphia, communicate to the *Therapeutic Gazette* for September the results of the administration of three hundred and thirty-eight doses of hydrobromate of hyoscine to fifty-seven different individuals. It produced sleep in fifteen cases, delirium in thirteen and was without marked effect or followed by various symptoms in the balance. From this it will be seen that the agent is certainly not a very reliable hypnotic, to say the least. Merck's preparation was used in the majority of the tests.

Tannate of Mercury.—According to Lustgarten and Kaposi this is the best of the preparations of mercury. The dose internally is about one and a half grains, which may be repeated twice daily. As high as eight grains may however be administered within twenty-four hours, without causing any symptoms of intolerance either from the stomach or mouth. It is readily absorbed, mercury being detected in the urine within twenty-four hours after its ingestion. Pauly adds his testimony to the same effect, having had remarkable results with it in the treatment of the syphilides, especially in condylomata in the region of the anus. All authorities recommend that it should not be given in connection with the iodides, as it is then decomposed, with the formation of mercuric hydriodate.

Galazyme is the name bestowed by Dujardin-Beaumetz upon a liquid analogous to koumys or kefir, recently devised by him. The formula, as stated by the inventor to the *Société de Thérapeutique*, is as follows:

Bakers' yeast	4 parts.
Sugar	10 "

Dissolve in as small a quantity of water as possible and add enough milk to make 1000 parts. Put into small clean and strong bottles, cork well and tie the corks down. Useful in all cases where koumys or kefir is indicated.

Posology of some of the Newer Remedies.—The *Rundschau Leitmeritz*, which is by the way, one of the very best of the German pharmaceutical journals, gives the following useful information concerning the dosage of the remedies which have come into general use since the last edition of the *Pharmacopœia*.

Osmic acid: best administered in pill form (made up with Armenian bole). The dose is $\frac{1}{80}$ grain which may be repeated several times a day.

Agaricine: best administered in combination with Dover's powder. Dose $\frac{1}{12}$ to $\frac{1}{8}$ grain.

Aloin: From $\frac{1}{3}$ of a grain to $3\frac{1}{2}$ grains, in pill form.

Antipyrine: Dose from 75 to 90 grains, divided into 3 portions, one of which is to be taken every hour.

Bismuth salicylate: Dose from 5 to 7 grains, in pill form. In typhoid this dose may be doubled and repeated every hour, up to 10 or 12 times.

Canabinone: From $\frac{2}{3}$ to $1\frac{1}{2}$ grain. Best administered mixed with finely ground roasted coffee.

Caffeine: To commence with, the dose should not be over 3 grains, but this may be repeated every hour until 4 doses are taken—or say 12 grains *per diem*. This may be increased to double the amount mentioned. The *benzoate of sodium and caffeine* is a double salt which contains one-half its weight of pure caffeine. It resembles the *salicylate of sodium and caffeine*, but the latter contains more caffeine (10 parts of caffeine to every 16 parts of the double salt.)

Colocynthin: Used subcutaneously. The dose is from $\frac{1}{8}$ to $\frac{1}{4}$ grain. It may also be administered in pill form, by the mouth, the requisite dose being from $\frac{1}{8}$ to 1 grain.

Convallamarine: Internally, in pill form. The dose is from $\frac{3}{4}$ to $1\frac{1}{4}$ grains, and it may be repeated every hour, until a total of 15 grains is reached.

Euonymin: Best given in pill form, combined with extract of belladonna or hyoscyamus. The dose is from 3 to 10 grains.

Helleborein: May be given in pill, solution, or in suspension in some mucilaginous vehicle. The dose is from $\frac{1}{8}$ to $\frac{1}{4}$ grain, repeated four or five times in the course of the day.

Tannate of Mercury (protoxide) may be given in a wafer. The dose is $1\frac{1}{2}$ grains, repeated thrice daily.

Nitroglycerin is best given in alcoholic or oily solution. The dose is from $\frac{1}{300}$ to $\frac{1}{60}$ grain, repeated several times a day. Rossbach prefers ether as a solvent. His formula for its use is as follows: Dissolve $1\frac{1}{2}$ grains of nitroglycerin in sufficient ether, and add the solution to a mixture consisting of 2 ounces of powdered chocolate and one ounce of powdered gum-arabic. Mix very thoroughly and divide into 200 pastilles. Each pastille will thus contain $\frac{1}{333}$ grain of nitroglycerin.

Picrotoxine; In aqueous solution. Dose from $\frac{1}{8}$ to $\frac{1}{4}$ grain.

Sulphate of thalline, may be given dissolved in wine or water (with some corrigent). The dose is from 4 to 8 grains.

Aperient Wine.—The formula for Monin's aperient wine is said by the *Progrès Médical* to be as follows:

℞	Tincture of Calisaya,	
	“ Simaruba,	
	“ Gentian,	
	“ Bitter-orange peel, of each f	3iiss
	“ Ignatia bean.....	3ss
	Sherry wine enough to make.....	Oij.

Mix and filter. The wine is tonic, carminative and laxative. The dose is from one to two fluid ounces.

Chloral-Camphor.—The fact has been known for a number of years that when gum camphor is brought into contact with crystalline chloral hydrate, the masses being equal or nearly so, both

solids commence to liquefy, the resultant fluid being a dense, highly refractive liquid of an odor reminding one somewhat of its two components. This liquid has been used in therapeutics to a limited extent for a few years past, but has never received the attention that it deserves. It is a local anæsthetic of a high order, valuable in neuralgias and cutaneous hyperæsthesia, and also in toothache. Up to very recently this curious chemical combination has not received any more attention at the hands of the chemists than of the therapeutists, though the writer in 1878 or '79, made a series of experiments which established the fact that a definite molecular compound was formed, in which the camphor somewhat exceeded the chloral hydrate. The difficulties in the way of the investigation during the heat of summer caused him to suspend experiments, and in the meantime he learned that Caze-neuve had already gone over the ground and established the facts sought for. More recently M. S. Cotton has discovered that this compound assumes, under proper conditions (of which high refrigeration is the principal), a definite crystalline form, viz: an octahedron, which when kept cool and dry is quite stable. Distilled water decomposes it into its constituents, the chloral remaining in solution and the camphor being precipitated. Owing to the volatility of the ingredients a very delicate determination of the relative weights is exceedingly difficult; but approximately we may say that when ordinary crystalline chloral hydrate is used the proportions are as follows: chloral hydrate 52.13, camphor 47.87. When anhydrous chloral is used the proportions are, chloral 49.25, camphor 50.75.

PHYSIOLOGICAL AND PATHOLOGICAL NOTES.

Secretion of Urine by the Stomach.—In an important work of Dr. Rossoni, recently published, on "Hysterical Anuria accompanied by secretion of urine by the stomach," the author's conclusions are (1) That anuria is not a rare symptom in hysteria, and that it is the result of physical changes not yet understood: (2) That in such cases the stomach may become the seat of the secretion of a fluid, more or less abundant, which possesses all the physical and chemical characteristics of urine: (3) That this secretion may cease without a resumption of their proper ac-

tion by the kidneys, hysterical anuria lasting sometimes two months: (4) That while pilocarpine may sometimes excite the kidneys into action in such cases, it frequently causes the salivary glands to secrete a liquid which is identical with urine, chemically and physically: (5) That while urea introduced into the circulatory current of an hysterical anuric whose stomach does not secrete urine, may produce uræmic poisoning, it may, on the contrary, be introduced artificially to the extent of sixteen grams (244 grains) without producing any effect on those subjects whose stomachs do secrete the fluid in question.

Incubation of the Virus of Rabies in the Wolf.—Jerome Jean Pestolozzi, a Venetian, born in 1674, and for many years a distinguished physician of the Hôtel Dieu of Lyons, and professor in the Collège de Médecine of the same city, in 1722 published a book entitled "Some new Observations on the Nature of the Pest (small-pox)." In this book he took strong grounds against the theories advanced by Father Kircher to account for the phenomena of contagion, and in one of the chapters he gives a wonderfully minute and vivid account of three cases of hydrophobia consecutive upon the bite of a rabid wolf which on the 6th of June 1704, bit a number of people in the neighborhood of Lyons. In two of these cases the disease developed on the 14th, and in the third on the 15th day after the lesions were inflicted. This is valuable historical material for Professor Pasteur and bears out most fully the suggestion made by that savant in partial explanation of the failure of his inoculations in the cases of the Russian moujiks who died after being bitten by a mad wolf, viz: that the virus of the rabid wolf is more energetic than that of the domestic dog in a similar condition, and consequently the period of incubation is shorter.

OBSTETRICS AND DISEASES OF WOMEN AND CHILDREN.

Natural Labor.—In strange contrast with the accouchement of civilized woman, with all its attendant pains, pangs and perils, the tedious waitings for the event, and more tedious period of "lying in," we find the following in the *Globe-Democrat's* special telegraphic correspondence, concerning the birth of a grandson to

the old Apache chief, Geronimo: "The experience of this Indian wife is not common even among the wild tribes of the Southwest. She gave birth to her child while the band was being hurried to San Antonio at the rate of ninety miles a day. The birth of the child caused a delay of a few minutes only. The Indians seemed to consider it a matter worthy of very little attention, and the soldiers have little pity in their hearts for Indians, bucks or squaws. Within a few minutes after the birth of the child, the mother was on the back of her horse once more and carrying her baby in a cradle strapped to her back. She kept her place in the cortege, and on the following day rode ninety miles. She is in seemingly good health, and her extraordinary experience has apparently done her no injury. The little papoose looks hearty and never yells or disturbs the family like an ordinary baby."

Red Oxide of Iron in Inflammation of the Neck of the Uterus.—M. Gentilhomme, of Rheims, in speaking before the Medical Section of the French Association for the Advancement of Science, said that in those inflammatory conditions of the neck and body of the uterus characterized by great enlargement of the neck in all its dimensions; where it has become spherical and is retroverted so as to exercise more or less pressure on the rectum; where the mucous surface of the whole organ is inflamed and is the seat of an abundant purulent discharge, he has found no remedy to compare with the red oxide of iron, used as a caustic, —the treatment being supplemented by absolute rest in a recumbent position. The inflammatory condition of the uterus just described is generally accompanied by menstrual troubles, abdominal pains and a general feebleness and malaise which are aggravated by even the slightest exercise, and hence the absolute necessity for the latter injunction. The ulceration of the neck, so frequently found in these cases, is in the opinion of Dr. Gentilhomme, a secondary phenomenon consequent upon the engorgement and inflammation, and not as generally assumed, the cause thereof. Three or four cauterizations are generally sufficient to relieve most cases, though the treatment has sometimes to be extended to double this number.

Disinfection of the Tamponned Vagina.—The practitioner, says the *Centralblatt fuer Gynækologie*, is frequently at his wits end to secure hæmostasis by the proper tamponment and at

the same time to properly disinfect a cavity full of tamponing material saturated with blood and other organic fluids. The solution of the problem lies in the choice of a disinfecting medium which may be incorporated directly with the material of which the tampon is made—something that will keep at rest the putrefactive fermentative process and at the same time not injure the patient or the tamponing material. Professor Koch has devoted himself to the solution of this problem with his usual attention to detail, and has made a very large number of experiments with absorbent cotton saturated with various antiseptics in various degrees of concentration, and afterward plunged into mixtures of blood and vaginal secretions kept at the temperature of the human body. In the course of these experiments he discovered that absence of odor by no means proved absence of the putrefactive bacteria and was therefore not to be accepted as a sufficient test. Briefly to recapitulate the results of Dr. Koch's labors we may say that he found a solution of corrosive sublimate of a strength that could be used in practice, totally inefficacious. Even at 1:500 it did not prevent the advent of bacteria. Iodoform, boracic acid, one *per cent.* solution of carbolic acid, and even carbolized glycerin were alike inefficient. On the contrary, it was found that an aqueous solution of carbolic acid of from $2\frac{1}{2}$ to 5 *per cent.*, and an alcoholic solution of salicylic acid of from 5 to 10 *per cent.* answered every purpose.

Practical Notes.

In Strangulated Hernia, after taxis and other devices have failed, the following has proved successful in my own hands and those of others: Introduce an elastic tube into the rectum as far as it will go, and through this slowly inject air. The intestinal coils will be seen to distend and after a short time the tumor will suddenly disappear. The mechanism of the action needs no explanation. The tube must not be withdrawn immediately. The air should first be allowed to escape through it and it must then be gradually removed. F. L. J.

To wash out the bladder without the use of a catheter is one of the simplest and easiest things in the world. A foun-

tain syringe may be used, but even this is not necessary, as any vessel provided with an orifice near the bottom to which a rubber tube may be attached, will answer just as well. The tubing should be five or six feet long and should terminate in a nozzle that can be inserted into the urethra to the depth of an inch or more. It should also be provided with a pinch-cock by means of which the flow of liquid can be controlled. The vessel containing the fluid to be injected should be placed on a shelf or hung up against the wall, 4 or 5 feet from the floor. The patient should squat down with his back against the wall, his buttocks resting on a low stool, or even on the floor, the heels drawn up close to the back of the thighs and the knees separated as widely as possible with comfort. A shallow basin or urinal should be placed below the parts to catch the drippings and the overflow of fluid. When all is ready the pinch-cock is released and the fluid allowed to flow through the tube. It readily and rapidly percolates through the urethra and into the bladder, filling the latter in a very few moments, a fact which is evidenced by a desire to urinate. The pinch-cock is again closed, the nozzle withdrawn and the fluid allowed to escape *per viam naturalem*. Where a bath-tub is convenient the patient may sit in this instead of on the floor. The beauty of the device is that the patient can manipulate it himself and there is no pain, or even discomfort, experienced in the operation. F. L. J.

The Condensed Statement of Mortality for the month ending August 31st, issued by Health Commissioner Stevenson, gives the following information: Total deaths, from all causes, 780. Of these 310 were of zymotic, 140 of constitutional and 234 of local diseases. Deaths from violence numbered 45. There was not a single death during the month from measles or smallpox, but scarlatina claimed 19, diphtheria 57, membranous croup 5, whooping cough 13 and typhoid 31. Seventy one children under 5 years died of diarrhoeal diseases and only 19 died from the same causes of all other ages. Sunstroke is accredited with 9 deaths, suicide with only 3, and homicide with 4. Per contra, there were 923 births registered during the month, leaving a nett gain of births over deaths of 143.

1886.]

Book Reviews.

Practical Notes on the Treatment of Skin Diseases. II.

ECZEMA. By GEO. H. ROHE, M. D. 12mo. pp. 46. Baltimore, Press of Thomas and Evans, 1886. From the Author. Price, 25cts.

The present little monograph is quite an improvement over the first one issued by Dr. Rohé. In this we find a concise statement of those points concerning eczema, which will prove useful and beneficial to the general practitioner. The efforts of the author have been directed principally to a clinical description of the disease in its various aspects and to a résumé of the rational treatment it demands. He states that it is probable that eczema, in the majority of cases, is due to some local irritation of the skin, but postulates that a peculiar predisposition of the skin to take on an eczematous inflammation, is necessary. He, on the other hand, strongly opposes the existence of any such thing as the eczematous diathesis. He, of course, recognizes the etiological force of internal disorders in relation to outbreaks of eczema in some cases.

Whilst stating that eczema is a curable disease, he qualifies this by remarking that the predisposition of the skin cannot be overcome and that, therefore, future attacks cannot be prevented.

He seems to be in favor of arsenic, where it is indicated, and his method is to use Fowler's solution, beginning with from three to five drops three times daily, and increasing the dose by one drop every third day, until slight puffiness of the eyelids or redness of the conjunctiva come on, when the dose is slightly diminished. He speaks highly of iron also, and of mercurial cathartics. The local-treatment he advocates is about the same as we find in all text books. In his list of washes which are, to some extent, antipruritic he fails to mention borax solution and the solution of common salt, both of which are very good at times when bicarbonate of sodium or lime water does not give satisfaction.

This little book is an excellent one and although no mention is

made of the pathology of the disease, the diagnosis and treatment are sufficiently elaborate to supply what the physician will most need in the management of a case. A good index is appended and will prove handy for ready reference.

A. H. O-D.

Ichthyol und Resorcin als Repräsentanten der Gruppe Reducirender Heilmittel. Von Dr. P. G. Unnna, Dermatologische Studien, Zweites Heft. 8vo. pp. 85. Hamburg und Leipzig, 1886. From the Author.

This excellent monograph begins with a very exhaustive consideration of the theoretical action of ichthyol and resorcin as reducing agents upon the skin. After this, the author proceeds to give us the action of these remedies upon various skin diseases. In acne rosacea ichthyol acts very favorably, causing the enlarged veins and venous capillaries to return to their normal dimensions, and also inducing resorption of the infiltrated skin. The pustules disappear and the tendency to fibroid degeneration is obviated. He has also found ichthyol valuable in acne externally and internally. It can be used with advantage in any form of the disease. In two varieties of eczema, the "nervous" and that due secondarily to parasites, he has found it useful, as also in urticaria, erythema nodosum, erythema multiforme, zona, herpes labialis et progenitalis and dermatitis herpetiformis. In intertrigo, pityriasis, seborrhœa sicca capitis, furunculosis, erysipelas and Rosenbach's "erysipeloid" he praises its value. Whilst in sycosis it is only useful in combination with tar and potash soap, he claims that the frequent application of ichthyol ointment or collodion will cause the disappearance of keloid and scars due to acne, variola, etc.

Although the author's experience has been rather more limited in regard to resorcin, he regards it as of service in the treatment of erysipelas and epithelioma as also in pityriasis capitis and seborrhœa sicca capitis. It is indicated in certain dry forms of eczema, accompanied by intense itching. It is also good in sycosis. The advantages claimed for it over pyrogallie acid and chrysarobin are, that it does not discolor the skin like the former nor irritate it like the latter and besides it is odorless.

This monograph is written in excellent style throughout and many valuable hints are given. Of course, the great praise lav

ished upon these two remedial agents is to be taken *cum grano salis*. Still it is the best treatise upon the action of these remedies upon the skin, which we have seen. In an appendix the author considers the action of mercury and regards it somewhat similar to that of the two agents he has just been considering.

A. H. O-D.

The American Chemical Fertilizer and Crop Journal.

—This is the name of a new journal devoted to scientific farming in its true sense—that which enables the tillers of the soil to get the highest results from the plantation, farm, greenhouse and nursery. It is edited by Prof. Francis Wyatt, whose writings on agricultural chemistry have a high reputation, not only in this country, but in England and Belgium, where scientific farming has been carried to its utmost point. There are a great many of our readers who are fortunate enough to live in the country and possess gardens and farms. To such we would cordially recommend the Chemical Fertilizer and Crop Journal. It is published by the *Ætna Publishing Co.*, 26 Church St., New York.

We have just received No. 1 Vol. I. of the *Pacific Record of Medicine and Pharmacy* published in San Francisco. It is somewhat unique, being printed in English and Spanish. It is a monthly of thirty-two large pages, edited by Dr. Charles W. Moore. The editor states that it is not from any desire to “fill a long felt want” that this new venture is launched, but rather to afford more opportunity for the native talent of California to develop itself. The journal is well gotten up, both as regards matter and typographical appearance, and we bespeak it a long life and a valuable one.

Dr. James G. Wakley, for the past twenty-seven years editor of the *Lancet*, died at his home in London on the 20th of August, from epithelioma of the tongue. The deceased succeeded his father to the editorship of the *Lancet* in 1829, and was never in general practice.

[Oct.,

Books and Pamphlets Received.

The Use of Electricity in the removal of superfluous hair and in the treatment of various facial blemishes. By George Henry Fox, M. D., 12 mo. pp. 67. Physicians' Leisure Hour Series. Detroit, Mich. Geo. S. Davis, 1886. Price, 25 cts.

The Modern Treatment of Eczema. By H. G. Piffard, M. D. 12mo. pp. 54. Physicians' Leisure Hour Series. Detroit, Mich.: Geo. S. Davis, 1886. Price, 25 cts.

Book Chat.—A monthly journal devoted to current literature, containing criticisms and notices of and extracts from new books as they appear. Published by Brentano Bros., New York.

Operations on the Drum-head for impaired hearing. By Seth S. Bishop of Chicago. Reprint from the Journal of the American Medical Association, Aug. 28th, 1886.

Cocaine in Hay Fever.—By Seth S. Bishop. Reprint from the Journal of the American Medical Association, Feby. 6th, 1886.

The Printing Press, the men that use it and the work they do. A quarterly journal devoted to the literature and mechanism of printing and printing machinery. Published by Charles Rollin Brainard. New York City.

The Value of Sanitation in its National Aspect, as compared with other public interests. By James E. Reeves, M. D., of Wheeling, W. Va. (Formerly of Washington, D. C.)

The Biloxi Fever: Report of the Louisiana State Board of Health, on the cases of yellow fever occurring in Biloxi, Miss. Reprint from the N. O. Picayune.

Massage in Nervous Diseases.—By F. W. Jacoby, M. D. Reprint from the *Journal of Nervous and Mental Diseases*, for June, 1886.

Surgical Lesions of the Brain and its Envelopes. Lecture by N. Senn, M. D. Reprint from the *Medical News*, August, 1886.

A Contribution to the study of Lupus of the Throat. By Ramon de la Sota y Lastra, of Seville, Spain. Reprint from *N. Y. Medical Journal*.

Paralisis Miopatica de los Crico-Aretinoideos Posteriores. By Ramon de la Sota y Lastra. Sevilla: Imp. de Diaz y Carballo. 1886.

Intercranial Hæmorrhage, in its Medico-legal Aspects. By John B. Lewis, M. D. Reprint from the *Proceedings of the Connecticut Medical Society*, for 1886.

Some Recent Experiences in Clinical Surgery. By Donald McLean, M. D. Reprint from the *Transactions of the Michigan State Medical Society*, for 1886.

Annual Announcements for the coming session of 1886-87, of the following schools and colleges have been received:

North-western Ohio Medical College, of Toledo, O. 4th year.

Medical Department of the University of Georgetown; Washington, D. C., 38th year.

The St. Louis College of Pharmacy, 412 S. 4th St., St. Louis. 21st year.

University of Kansas City, Medical Department, sixth Annual Announcement.

Melange.

Hearing in Colors.—The close analogy which exists between the phenomena of light and those of sound, especially in the modes of progression and perception, as illustrated in sight and hearing, has a most forcible and curious illustration in the case of a person recently examined by Dr. Lauret of Montpellier, and by him described in the *Gazette Hebdomadaire*. This man, an army officer aged 50 years, states that the audition of any and every sound instantaneously produces a color before his vision. What is more, each sound produces a definite colored image, constant in size, shape and color, for the same sound, but varying with every modulation or variation of the same. He is thus enabled, for instance, to represent each musical note by a definite shape and color. The liveliest luminous impressions are produced by the vowel sounds and those simple diphthongal sounds which simulate the vowels (au, ai, oi, etc.). The consonants do not give a separate luminous impression, except the *m* or *n* at the end of a word, and which sensibly modify the color invoked by the preceding vowel sound. In current conversation the *timbre* of the voice of the person speaking determines a sensation of a certain uniform tint, which varies with the pitch and tone of each speaker—a sort of monochrome background, as it were, upon which are projected the colors invoked by the separate vowel sounds. In music it is this background which varies. In passing, for instance, from the lower to the higher notes, the color varies from a deep maroon to a pale yellow, or even pure white. Conceive what a play of colors must be caused by a song with instrumental accompaniment, or by an orchestra! By a strange coincidence, the wife of this officer possesses the same idiosyncrasy, though in a minor degree, and their child, whether by association or heredity, presents the same phenomena. The color evoked by any given sound is not the same in each of these per-

sons; and while, with the husband, the image is exteriorized (if we may coin a term to signify that with him the image is located in space at from one to two metres distant from the eye), with the wife the luminosity is an internal or mental impression, simply. In pursuing his investigations of these interesting phenomena, Dr. Lauret mentioned the facts to a friend, a lawyer of Montpellier, and was surprised to learn that he too possessed the idiosyncrasy in a modified degree. With this gentleman *a* is red, *e* yellowish, *i* black, *o* white, *u* blue. Comparing these colors with those peculiar to M. A. (the officer), he found that they differ totally, except in the *e*, which to the former is yellowish and to the latter a sort of *café au lait* hue. There was, however, a surprising coincidence in the general effects of voices. In each case a bass voice was called maroon, a tenor yellow, and the high notes faded gradually, as they grew higher, into pure white. These facts afford a striking proof of the parallelism of the wave lengths of sound and of light. I am inclined to believe that the evocation of luminous impressions by the impact of sound waves is not so rare a phenomenon as has hitherto been supposed, and that it exists to a greater or less extent in almost every person, its discovery awaiting only that process of mental analysis which is peculiar to students of nature and so foreign to the great bulk of humanity.

Eunuchs—the Eunuchoid Voice.—In a work elsewhere referred to—the *Physiology of the Voice*, by Gougenheim and Lermoyez, the authors devote a chapter to the consideration of the influence of the genital organs upon the voice. An especial study has been made by them of the larynx of an eunuch and of the peculiar modifications produced by castration. Incidentally some very interesting information is given concerning this product of oriental luxury and civilization. Siout and Girgeh (Upper Egypt) are the great centers of the manufacture of these human neuters. Here are brought the children who are to be mutilated; usually negroes of the age of six or eight years, poor and miserable, captured in some slave-making raid. The little creatures are fed and cared for until they have become strong enough, in the opinion of the mutilator, to stand the operation, which is sufficiently simple,—the knife, usually a Sheffield razor, is seized in one hand and the scrotum and penis of the victim in the other, and with one swoop the fell deed is done, both pendants are cut

off. Bleeding is stopped in the same manner that it was managed two, three or four thousand years ago, by the actual cautery or by bathing the wounds with boiling oil. The poor, mutilated, scalded creature is then buried up to the chin in the hot sand of the desert, where he is left for twenty-four hours. Only one out of every four stands the operation, seventy-five *per cent.* dying in tortures that can be imagined only by those who have seen the dreadful deed performed. At the end of the twenty-four hours the living are disinterred and their wounds dressed with fresh clay. This is all—the patient is definitely and immovably fixed, not only as to sexual system, but as to the voice, for the balance of his earthly pilgrimage.

But the humanizing influences of western civilization are gradually permeating even Mohammedan Africa, and these *castrati* are no longer made in the quantities turned out in former years. As a consequence, the *tenore castrati*, once so much in demand in Italy, especially for the choir of the Sistine (the Pope's own) chapel, are no longer attainable. The deficit is met by the oriental and Italian skill in counterfeiting—at least so we are informed by Dr. Castex, in a review of the work of our authors recently published in the *Annales des Maladies de l'Oreille, etc.* "You must know," says the doctor, "that this peculiar voice (the eunuchoid) can be counterfeited, but only at the cost of long and severe training. While in Rome a few years ago, I was very anxious to hear certain celebrated *castrati*, and one Sunday morning at the church of Saint Marcel de Corso, the wish was gratified—or rather, I was told that it was. The voice was strong but lacked suppleness. I determined to see its possessor, and I saw—a great big, brown and bearded gallant, as strong as an ox, and who might have served as a model for a statue of paternity itself! Piqued at the sight, I went on a voyage of discovery and learned that the singer was not an eunuch. The manufacture had been discontinued in Rome for many years, but since singers must be procured who could fittingly and properly render the liturgies and chants, men were trained to imitate the eunuchoid warble."

It has not been so many years, however, since the *tenore castrato* was a very important personage in the opera troupes employed in Italian cities.

Ordure used as medicine.—In looking over ancient pharmacopœias, works on medicine and especially on domestic reme-

dies, one is struck with the persistence with which certain remedies reappear from age to age, through hundreds and even thousands of years. Another most curious feature is the fact that these perennial remedies are almost invariably such as no civilized or educated physician of the present day would recommend. Indeed, they are usually not only inert as medicines, but are of the most filthy and revolting description. Of those that appear the earliest in medicine, and reappear from point to point, adown the corridors of time, none hold their places with greater tenacity than animal excreta, feces and urine, used not only as external applications but as internal remedies. In the *Dictionnaire Infernal*, of Collin de Plancy, on which I have drawn several times for interesting items in this department, I find some very curious information on this point. "As man" says this author, "is the noblest of animals, we find that to his ordure are ascribed properties most valuable and even marvelous in their healing powers over many maladies. Dioscorides and Galen assure us, on their reputations as physicians, that it will most certainly cure the quinsy, provided it is administered *secundum artem*, to-wit: pick out a young and healthy man, of good temperament, and feed him on the flesh of rabbits and on bread devoid of salt or leaven. For drink he must use nothing but good red wine, and this diet must be maintained for three full days, The first excrementa that pass after the lapse of this period are the most efficacious. They are administered, after being mixed with an equal volume of strained honey, as an internal remedy, or bound to the throat as a cataplasm. The remedy is infallible." The properties ascribed to the ordure of dogs are well known. Mixed with urine and administered twice daily to the patient (who must be ignorant of the nature of the remedy), it is held to be infallible against dysentery. To cow's dung are ascribed all manner of virtues. Mixed with flowers of chamomile, rose leaves and clover (melilot) and applied to the part, it is a sovereign specific in orchitis and epididymitis. Galen tells of a physician in Misenum who cured all manner of dropsies by the same remedy, used in the same way, or while quite fresh from the animal. Pig's dung is recommended in hæmorrhages from the lungs. It is administered mixed with some of the blood that has been 'spit up,' either raw or fried with butter. Goat dung, as Galen says, will cause tumors to suppurate, cure stiffness and swelling of the joints (espe-

cially of the knees). It must be mixed with barley flour and oxycrate (water and vinegar) and applied to the swelling. Mixed with fresh butter and the lees of nut oil, and applied to the jaws, it cures the mumps. This latter disease may also be cured by making the patient drink, every morning for eight days, a glass of white wine in which have been dissolved five pellets of goat's dung. Sheep's dung, says Dioscorides, is a valuable remedy when externally applied, being, when mixed with oil, sovereign against burns; but it must never be exhibited internally. Galen and Paulus of Ægineta, on the contrary, assure us that mixed with oxymel it is a good remedy against poisoning by mushrooms (acting as an emetic). [In this opinion Dioscorides is also opposed by the "grannies" of the Western and Southern States and perhaps elsewhere, who declare "sheep-safferin tea is the *powerfullest* sweat" ever given in measles. F. L. J.] Galen also tells us how a physician of his time used sheep dung mixed with hippocras to cure violent colics. We might go on through the whole list of ordures, but the subject is not inviting. We will only add to the above a domestic remedy for tooth-ache which we have seen used by the negroes and ignorant whites of the South, viz: chicken manure, or *hensaffron* as it is technically termed by the voodoo doctors and doctresses. It has not been so many years since the writer knew a village lawyer who resorted to an old negro woman for a remedy for a raging hollow tooth. The cavity was filled with some unknown substance, the taste and odor of which was destroyed by the creosote, etc. that had been previously tried in vain. It gave him temporary relief, but in the night the plug came out and *was lost*; the pain returned and he went back to the old darkey, who in the meantime had gone to bed and did not want to be disturbed. On being importuned by her patient for some more of the medicine, the old woman impatiently answered "you white-folks is *too* triflin! Go out to de hen-house and he'p yo-sef"—adding however, more good-naturedly, the caution to be sure and not take any 'shanghai saffern' as it had no power. The information caused a fit of nausea that cured the toothache.

A new diagnostic sign of mental imbecility.—Dr. Giné, of Barcelona, has published in the *Independencia Medica* an article on what he terms "phrenopathic uranostomatoscopy" and in which he maintains that all congenital mental deficiencies are accompanied by a depression of greater or less profundity in the

centre of the palatine vault; and further, that this depression is in direct and constant proportion to the degree of mental deficiency. It is, for instance, comparatively small in simple dulness or retardation of the faculties, deeper and more marked in imbeciles, and deepest and largest in idiots. He therefore suggests the exploration of the palatine arch as a method of diagnosis in such cases. This exploration may be made with the finger, though the doctor suggests an instrument of precision in the shape of an uranometer in which the various degrees of imbecility may be read off like those of a thermometer or specific gravity instrument. We would advise him to make it with a good long stem if he intends trying it on himself—that is, if there be any truth in his statements.

Female Doctors do not make much headway in Prussia, if we may judge by the text of a recent decree, emanating from the Minister of Public Instruction and by which women are refused permission to matriculate at any Prussian university. The decree goes so far as to exclude females from even hearing a lecture. In France, while women may receive the degree of doctor of medicine, they are not allowed to hold clinics, even of accouchements.

Breathing Through the Mouth.—The October number of that inimitable journal for “young folks of every age”—from five to seventy-five, *Saint Nicholas*, has the following bit of good hard sense, from the pen of Helen Clark Swazey: “Tight dressing, though the most serious hindrance to the habit of good breathing, is not the only obstacle. There are careless ways of sitting and standing that draw the shoulders forward and cramp the chest; and it is as hard for the lungs to do work when the chest is narrow and constricted as it is for a closely bandaged hand to set a copy of clear, graceful penmanship. Then there are lazy ways of breathing, and onesided ways of breathing, and the particularly bad habit of breathing through the mouth. Now the nose was meant to breathe through, and it is marvelously arranged for filtering the impurities out of the air, and for changing it to a suitable temperature for entering the lungs. A story is told of an Indian who had a personal encounter with a white man much his superior in size and strength, and who was asked afterward if he was not afraid. “Me never afraid of man who keeps mouth open,” was the immediate reply. Indeed, breathing through the

mouth gives a foolish and weak expression to the face, as you may see by watching any one asleep with the mouth open."

At the late meeting of the American Dermatological Association the following officers were elected to serve during the ensuing year.

President, Dr. H. G. Piffard, of New York; *Vice-Presidents*, Dr. F. B. Greenough, of Boston, and Dr. R. B. Morrison, of Baltimore; *Secretary*, Dr. C. H. Tilden, of Boston; *Treasurer*, Dr. Le Grand N. Denslow, of St. Paul.

The von Graefe gold medal, for the most valuable contribution to ophthalmology during the past ten years, was awarded to Dr. Von Helmholtz, of Berlin, at the last annual meeting, of the German Ophthalmological Society held in Heidelberg.

American Rhinological Association.—We learn that the local committee of which Dr. H. F. Hendrix is chairman, has secured the use of the School-board room in the Polytechnic Building for the sessions of this association, which meets in this city on October 6th. We also learn incidentally that the titles of twenty-nine papers to be read on that occasion have already been handed in to the secretary. The meeting promises to be a success in every way.

Ye Olde Booke Man.—If any of our readers have a taste for the quaint and curious in literature, has any books to sell, or wants to buy books at figures that would make the high priced book store men weep, let him or them send to Joseph McDonough, No. 744 Broadway, N. Y. for his catalogue of books.

The new National Association.—The *Globe-Democrat* of this city has a special dispatch from Washington, D. C., dated September 24th, conveying the following intelligence concerning movement: this

"The representatives of the medical and surgical societies of the United States met at the Army Medical Museum to-day and effected a temporary organization by the election of Dr. Bussy, of this city, as chairman, and Dr. J. Ewing Means secretary. The work was all preliminary, as the subject in hand was to consider the advisability of arranging for regular meetings in Washington

of the various medical and surgical societies. Dr. Pepper, of Philadelphia, submitted a proposition that it was desirable to form a congress of the societies represented. It was decided to form such a congress, and it was agreed to constitute an Executive Committee of one representative from each society of the union favoring the project, and that this Executive Committee should decide the time for meetings in Washington. Also, that at the regular meetings the principal order of business should be an address by the President, and then the presentation of original essays for discussion. It was definitely decided that all meetings shall be held at Washington, but the remaining details, except the address by the President and the essays, will be left to the Executive Committee. Each representative will report back to his society, and if it approves the plan, it will elect a member to the Executive Committee.

Buffalo College of Pharmacy.—We note with pleasure that the University of Buffalo, has added a department of pharmacy to its already excellent curriculum. The formal opening of the new branch took place on the evening of Sept. 21st, the charter being presented by the Hon. Carleton Sprague, chancellor of the University. It was received in behalf of the faculty of the College by our old friend, Prof. D. S. Kellicott, well known to our readers as the Secretary of the American Society of Microscopists, and who has been chosen dean of the new branch. The University of Buffalo has been established for 40 years and no institution of learning in the East, has a better record for turning out thoroughly educated men, in all of its branches. Under the deanship of Dr. Kellicott, we are sure that the Department of Pharmacy will be no exception to the rule.

The Cholera.—Although but little is said concerning it, the ravages of the disease in Italy and the Levant continue unabated. The latest intelligence shows that it has appeared in Pesth, and some very suspicious deaths have occurred in Vienna, although the authorities deny the existence of cholera in either city. The percentage of deaths in the affected Italian cities is rather lower than it was earlier in the season, but is still very large—from 33 to 50 per cent.

Physicians of Charleston.—Since the publication in the daily papers of the first announcements to the effect that the physicians of Charleston were in need of immediate help, and the writing of the editorial in the present number of the JOURNAL, we learn by letters from prominent Charleston physicians to our cotemporary, the *New York Medical Record*, that such is not the case, and that the appeals were unwarranted. We are glad to know the fact, and we are also glad of the opportunity to recognize the readiness with which the appeals made by the *New York Medical Record* and other medical journals throughout the country, were met by generous donations. The *Record* alone collected and forwarded over \$800 in a couple of weeks. Similar funds started in Boston and elsewhere, met with similar responses.

Spencer's Objectives.—Amid that galaxy of names who have combined to make American optical instruments—telescopes, microscopes and lenses for other scientific apparatus, stand at the very head and front the world over—Spencer, Tolles, Clarke, Bausch & Lomb, Gundlach and others, none stands higher than that of Spencer. The fame won by the father, together with his wonderful skill and natural genius, seems to have descended to the son, Herbert Spencer, of Geneva, N. Y., one of whose objectives the writer had the pleasure of testing at the recent Chautauqua meeting. Those who contemplate ordering new objectives or other optical apparatus, would neglect their own interests did they not correspond with Mr. Spencer, whose card is found elsewhere.

The New York Medical and Surgical journal is the title of a monthly printed in Minneapolis, Minn. and edited by one Atlanta (Ga.) and one Chicago doctor. In glancing through its pages one is puzzled to know where the 'New York' part comes in. It claims to have the "largest circulation of any medical journal published" and is altogether an anomaly in medical Journalism. In the introductory article of the number before us, a Prof. McCabe, addressing the graduates of the Beach Medical Institute, is made to say, among other things concerning the different schools of medicine, "still others have founded their hope upon Podophilian, Leptandrium, a kind of patent specific medication, "copy right secured," and abjuration of mercury under all circumstances." Pasteur is called *Pastuer*, and the students are warned against taking any man's "*epsi dixit*" in anything. This article,

however, winds up with the following piece of good sound sense ;

"In conclusion, let me say, be not boastful or self-conceited. Dont cure every case that presents itself. Some diseases develop into a condition that the so-called cure is impossible. Aye, the doctor does not cure any way. If he understands morbid conditions and normal functions, he may assist vital force in overcoming defects and obstructions, for, be it remembered, nineteen cases out of every twenty tend to health independent of medical treatment. Finally, strive to be independent, rational medical practitioners."

Palatable Quinine.—The *New England Medical Monthly* says that syrup of yerba-santa not merely disguises the taste of quinine but renders it absolutely palatable. While this may be true, we would remark that there are various ideas among mankind in general as to what constitutes palatableness. To a Russian his candle-ends, to a Spaniard or Italian his garlic, to the 'heathen Chinee' his shark-fins and puppy dog stew ;—why not quinine cock-tail *a la* yerba-santa to the Down Easters ?

Sparteine in heart troubles.—This new alkaloidal base, derived from broom corn (*genesta scoparia*) and of which a notice was published in the JOURNAL for November 1885, has been further studied by See, Bardet and Egasse, and it seems certain that in it we have a therapeutic agent of greater value in adynamic heart affections than either digitalis or lily of the valley. The base is a liquid, somewhat heavier than water, boiling at 287°F. It is very sparingly soluble in water, but combines readily with the acids, forming salts of which the sulphate is the most stable thus far discovered. It is of a warm bitter taste, and may be given either in pill or solution. The dose is from one grain to a grain and a half, in which quantity it has a powerful dynamic and regulatory action upon the heart, more prompt and lasting than that of digitalis or lily of the valley. It immediately regulates the rythm and is indicated in those grave atonic conditions of the heart attended with slowing of the pulsations. Its phenomena appear generally within an hour after the administration of the drug and persist for three or four days. The following is the formula for the solution of sulphate of sparteine :

R. Sparteine sulphate	gr. vii.
Cherry-laurel water.....	f. ʒ ss.
Simple syrup.....	f. ʒ v.
Distilled water enough to make	f. ʒiij. M.

Dose; one tablespoonful, morning and evening.

Pilocarpine in Poisoning by Atropia.—Roth, Purjek and others have recently published statements which go to show that in all cases of intoxication from the poisonous solanaceæ,—belladonna, stramonium, etc., pilocarpine is a most valuable remedy. It should be administered hypodermically, a sixteenth of a grain every quarter or half of an hour, according to the urgency of the case. Roth gave eleven such injections to a little girl of four years of age, who had been poisoned with stramonium, and saved her life. It is said by both the writers whom we have quoted above, that the specific effects of pilocarpine (salivation etc.) do not make their appearance in these cases until the solanaceous poison is entirely neutralized, and that the appearance of ptialism is therefore an indication that medication has been continued long enough.

Coca in infantile diseases.—Bott has found that tincture of coca leaves (1 part of the drug exhausted in 5 parts of alcohol) in doses of from 5 to 20 minims every hour, has a most happy effect in cholera infantum. Very soon after the administration of the first dose the stools become less frequent and of a better consistency. It is also useful in inflammations of the pharynx and tonsils, though a five *per cent* solution of cocaine, applied locally, is much better. It is in whooping-cough, however, that the value of cocaine is most marked. A five *per cent* solution applied to the fauces acts like a charm, stopping the paroxysms of coughing and lengthening the intervals between them in a most remarkable manner. Administered internally the drug seems to be of no particular value in the diseases of infancy.

Prophylaxis of Rabies.—In the *Ruskaja Medicina* Dr. Lascekevicz states that cantharides has been successfully used by him and others as a preventative of canine rabies. The drug is administered in the form of a powder, one grain daily, accompanied by some form of active cathartic. The treatment should be commenced as soon after the bite as possible and should be

continued for five or six days. The remedy is said to be useful even after hydrophobia has developed, the author claiming to have cured two cases by means of it. He states that the remedy was known to the ancient Arabians, and is still used in Arabia and Persia.

Circumcision.—In a thesis on Criminal Abortion recently presented by Dr. Leon Galliot, and published in book form in Paris, the author states that there are over two hundred millions of the human race who are circumcised. As shown in an editorial article published in the *ST. LOUIS MEDICAL AND SURGICAL JOURNAL* some months ago, this rite, far from being peculiar to Judaism, is one of the most widely distributed of all the mutilations of the human form, tattooing not excepted. Dr. Galliot adopts the theory of the origin of the mutilation stated in the editorial referred to, viz: that it was done originally to procure trophies of war, exactly as the American Indians of to-day take scalps. This idea, which seems to be an entirely new one to the author and to most of the French reviewers of his work, is ascribed by Dr. Galliot to Sir John Lubbock; but erroneously so, as it was first clearly stated by Herbert Spencer, in his *Evolution of Ceremonial Government*. From being a mutilation practiced upon the dead, it gradually came into use among ancient peoples as a means of marking prisoners of war, and hence in time came to be a sign of bondage. It was in this sense that it was adopted by Abraham in his covenant with Jehovah, and was meant to signify that all of his tribe and race belonged peculiarly to this God. The spirit which finds in the rite some wonderful hygienic value and ascribes to its origin a deep knowledge of the laws of health, is akin to that which always prefers a miraculous solution of every phenomenon of nature, rather than ascribe it to the definite working of laws that may or may not be understood. Circumcision as practiced by surgeons, like every other operation, should be performed in certain cases, but that it should be practiced upon every male child indiscriminately, as urged by the Hot Springs school, is a piece of folly that no reasonable man will agree to.

Incontinence of Urine in Little Girls.—This is frequently caused by vulvitis, so common in scrofulous or badly nourished children. Sometimes it is caused by the presence of ascarides (most commonly oxyures) in the vagina. Excess of tonic in

the muscular fibres of the bladder is also a frequent cause, as is the feebleness of the vesical sphincter. With such a variety of causes it is useless to look for any one method of treatment that will reach all cases. Attention must therefore be given to the cause, and the first care must be to remove it. The following hints will prove of great assistance in the treatment:

1. When the cause is a simple vulvitis; sitz-baths, lotions of bran-water, or water in which walnut leaves have been steeped. This should be followed by dusting the vagina with the following powder, applied by means of an insufflator;

Starch.....	10 parts
Oxide of zinc.....	5 "
Borax.....	5 "

Reduce to an impalpable powder by thorough trituration.

If the vulvitis is diathetic there should be constitutional treatment. Cod liver oil, syrup of iodide of iron, antiscorbutic syrup etc., suggest themselves to the practitioner.

2. If the trouble depends upon helminthic disturbances in the rectum give, every morning and evening, a dose of the following mixture:

℞ Pulverised Semen Contra,	
Carrageen, of each.....	gr. xxv
Calomel	gr. viij
Sugar in fine powder.....	3 j.

Mix, and divide into six papers. If the child is over five years of age this dose should be increased proportionately.

Santonine in doses of from one to four grains will answer equally well in most cases, where not contraindicated.

To destroy worms in the vagina nothing is better than a decoction of cloves of garlic. [It is a common remedy in parts of France, and in the Gulf States of America, and it is certainly most effective. F. L. J.] This should be injected by the physician himself, using a small syringe, to the nozzle of which is attached a piece of gum catheter or other flexible tubing not too soft nor yet hard enough to wound the parts, which are exceedingly tender. This should be carried quite to the bottom of the vagina, and the fluid should be so directed and forced that it will penetrate all the folds and crevices of the cavity.

3. If there be a want of equilibrium between the tonicity of the muscular walls of the bladder and the sphincter, belladonna should be administered, either in powder or syrup. The latter is preferable for little children.

When the incontinence is not only nocturnal, but accompanied by involuntary discharges of urine during the waking hours, recourse may be had the following.

℞ Extr. nucis vom. alc.....grs. v
 Ferri carbonat.....grs. xxx
 Excip. q. s. ut fiat massa.....

Mix and divide into 30 pills.

For children of from one to three years, one of these pills on retiring will be sufficient. For those from three to seven years old, one should be given night and morning.

For older girls, especially those menstruating for the first time, I prefer sulphate of strychnia to the extract of nux vomica. The officinal syrup in teaspoonful doses is most excellent. This medicine must be watched, however, very closely and must be discontinued upon the appearance of the slightest muscular twitchings.

When strychnia alone seems to be insufficient its action may be supplemented by faradisation. The application should not last longer than three minutes, and should be given every other day, the positive pole being applied to the urethra and the negative to the sub-pubic region.

Vegetations of the Umbilicus in the newly born.—M. Broussole (in the *Revue mensuelle des maladies de l'Enfance*) says: Thèse peculiar tumors of the navel of newly born infants are far from rare. They occur from the second to the fourth day, and cannot consequently be called congenital. They appear during the fall of the cord or shortly afterward. Usually single, they are sometimes multiple, and consist of little, humid, red excrescences resembling non-malignant fleshy tumors. Sometimes they look like a grain of wheat, or a cherry, but more often they resemble a tubercle or the papilla of a polyp. They are generally pediculated and grow directly from the dermis. They exude a sanguinolent serosity, which produces superficial excoriations of the skin in the neighborhood of the navel, staining the linen a dirty yellow. Sometimes these vegetations are vascular and they have been known to give rise to serious and dangerous hæmorrhages, though this is exceedingly rare. They usually cause no pain of themselves, the infant suffering only from the consequent excoriations. They sometimes grow with great rapidity, successive crops of them coming and adding to the original mass. They sometimes

drop off of themselves, leaving no scar or ulcer. The author states that they are best removed by means of a ligature, though when snipped off by the scissors they rarely return. He considers them to be true myomatous or papillomatous tissues of an inflammatory fungous origin.

Persistent Hiccough due to Needles in the Stomach.—

M. Liegeois reports in the *Revue Médicale de l'Est* a case of hiccough which is interesting on account of its etiological bearings. A woman began to hiccough, after a sudden emotion, and the conditions persisted for twenty-four days, night and day. The milk and broth taken by the patient were not vomited. Bromide of potassium, bromide of sodium, and ether were administered without effect and M. Liegeois, who was called the twenty-fourth day, ordered high doses of chloral hydrate and hyosciamine. The patient slept and the hiccough ceased during sleep, but immediately recurred upon waking. After a few days, it ceased for a longer period of time, only to return when the patient became irritated or when she took food or drink. A few months later, there was found in the epigastric space, on the right side, an abscess from which there was discharged a needle 3 cm ($1\frac{1}{8}$ in) in length. Eight more needles, somewhat shorter, were afterward extracted. From that time the hiccough ceased completely. The patient expressed entire ignorance as to the manner in which the needles had found an entrance into her body.

The Treatment of Warts.—Rapin gives this method: The peelings of two lemons are macerated in about four ounces of concentrated vinegar. The warts are painted with this, morning and evening, and in a few days are removed without any difficulty. Vidal advises spreading *sapo viridis* on a piece of flannel and applying this to the warts, night and day, if possible. In about fifteen days, the warts become soft, and simple scraping will cause them to disappear. It is said that the continuous application of castor oil will have the same effect.

Rupture of both Recti Femoris.—M. A. Poncet reported to the Société des Sciences Médicales of Lyons the case of a man of 52 who, four years ago, in making violent efforts not to fall backwards, ruptured the tendon of the rectus femoris of the right side at its insertion in the patella. Two and one half years later an ef-

fort to prevent a fall caused a similar accident on the left side. The patient remained in bed for several weeks, without any apparatus, then arose but found certain movements either impossible or very difficult to execute, notably going up or down stairs. There is also great instability, as the least effort will throw him down backwards. Arthrotomy with suture of the torn ends of the tendon is contraindicated, on account of the age of the patient, and resection of the knee-joints to obtain ankylosis would not be safe. Mr. Poncet very wisely concluded that the only means to be employed in this case would be an orthopædic appliance and in this M. Daniel Mollière fully agreed. M. Mollière suggests that, having seen this accident occur in a gouty patient, he regards it as extremely probable that in the gouty diathesis there is produced a deep alteration of the muscular tissues and that subjects having had gout are predisposed to such accidents as related above.

Tyrotoxinon and its Development in Milk.—Dr. Victor C. Vaughan, who has devoted quite an amount of time and research to the study of tyrotoxinon (cheese poison) says that it is a highly poisonous ptomaine which produces symptoms of dryness and constriction of the fauces, nausea, retching, vomiting and purging. Some ice-cream sent by Dr. Henry B. Baker (*Practitioner*), Secretary of the Michigan State Board of Health, was examined and found to contain tyrotoxinon. It was reported that the ice-cream had poisoned a number of persons, but none fatally. The circumstances under which tyrotoxinon develops require further study. It may develop in normal milk, kept in a clean bottle for three months; but it is evident that in some instances it appears much earlier. The production of the ptomaine is in all probability, due either directly or indirectly, to the growth of some micro-organism. Dr. Vaughan has not been able to obtain enough of this poison to make an ultimate analysis, but he is satisfied that it is a chemical body produced by fermentation. Tyrotoxinon has also been found in custards and it has not been settled whether the germs involved in the production of the poison exist in the milk or in the eggs.

The following literary curiosity was received not long since by a well-known physician of St. Louis. As a curio it is a gem.

St. Louis agst—

Dr. —

Sir I hope you Will pardon me for making one remark

to you why is it that no man will try to find out by Science or other wise anny one pill or powder that will kill or cure malaria or anny one Medicine that will clain it out off the Stomach where as this is Just the root off all other diseases this I am fully convinced off for when this terable Mouster grips me sir I am choaked and every air passage cloged Kidney Liver troath chest and all are cloged Many things will help it for a time quit this remidy a few weeks back it is again Patten Medicine Men will tell me you Must tak a a dozen or too bottles before you can get relief yet the quinaine in it its Self will kill it for the time but back it comes again and every time it comes again and every time it returns it Leaves its deadly brand here the afflicted are just Working between Life and death for those Scorpions that Care Not weather they live or die only clip the Last hard earned dime. from there family ninety per cent off them are not Schooled to Doctor a good Kennell off hounds Sir and If they were to attempt to practice Meadicine in anny other Country than this they would be imprisoned for Manslughter. Not only the Young and Ill raised Cubs but manny off the old Professors they Grant those young coons deplomas Some for influence and Some procure it by other Mains too. the Nation is infected with this Class off dead fine things they Cannot brook to Labour and no Capital then they must be Doctors to keep in Society or If not they got to take the back ground but the question is Why does Men off brains and bright training that Spend years in the pursuits off knowledge tolarate this Cruel and terable injustice to be perpatrared by those Woolfs off distruction on there fellow Man Sir Say you Men off Soul where is the blood and breed off American Manhood gon to Say in a Word who Cares What distinction befalls his Neighbor Just So long as his own bread and butter is at hand No but remember there is none off those Old professors to Old to Sip out off the reverce off fortune the South little thought thirty five years ago that She Should bend to the epidemick No but the read hand off vengeance off a long insulted God. who is Just as well as merciful brought them on there knees where they will Stay be sure till they repent which will be never no never you Spak Sir off true Science Where is it I am Now eight years gowing from College to College and meet oh God how Many professors and Some I meet in this time Well every one had a Name off his own for My disease Sir here they are Now in rank

Dr. — Said it was Cancer off the Stomach Well Dr. — Said it was the Gasteric nerve off My Stomach was decaying young Dr. — Said it was Catarrh off the Stomach] Now great god Just See all this Sicence Will you Sir now it prooved it Self to be a poly pus that was growing in Ny Stomach for a Number off years I have got the pieces and parts here in a bottle Sir the most ignorant Can See now that all this great Science could Never find out My disease Sir and If So fit you See I will take it to your office and See for your self Sir.

Most respectfully,

Local Medical Matters.

We are pleased to note the fact that Dr. L. Ch. Boislinière has recovered from his late illness, which was quite severe.

Medical Journalism in St. Louis, at present, seems to be somewhat vaccillating, if the reports which are circulating on the street are to be believed.

There is some talk of organizing a new Medical Society here. St. Louis could well afford to have another, especially if the men composing it do good work.

The St. Louis Medical Society resumed its regular meetings for the winter season on Saturday, Sept. 18th. The proceedings so far are up to the usual standard.

Visitors.—Among the many well-known practitioners from the internal cities of Missouri, who took in the Conclave, we noticed Doctors J. W. Heddon and Jacob Geiger of St. Joseph and Dr. Willis P. King of Sedalia. They seemed to be enjoying the festivities just as much as common folks who have to work for a living.

Hotel Physicians, or those of the down-town doctors who do a hotel practice, did not get much out of the recent Conclave, although the hotels were crowded to repletion. Every visiting body had from one to a dozen doctors in its ranks, and as a consequence, when the members were curled up by too much St. Louis hospitality they were treated by their own medical attendants.

Beaumont Medical College.—We are informed that the prospects of this new medical school are most flattering. On the 25th of September there were already forty applications for matriculation, and the probabilities are that this number will be much increased before the date set for the formal opening, Oct. 4th. The school has a good building, well arranged, and a most excellent corps of teachers. With the right sort of a send-off there is no reason why it should not leap at once to a front place among the colleges of St. Louis—or, indeed, of the whole country.

The Hon. D. R. Francis.—The *Weekly Medical Review* pays a glowing tribute to our mayor for the aptitude which he displays in the more social portions of his civic duties, especially in the felicity of his speeches of welcome to visiting bodies. The tribute is well deserved. Nothing could have been happier than his remarks in welcoming the American Medical Association, and they were all the more grateful to us as doctors because free from the puerile attempts at witticisms against physicians which every layman thinks himself entitled to indulge in on such occasions.

The Palmer Slide Co.—The manufacture of ground-edge slips for mounting microscopic preparations was but a few years ago entirely in the hands of foreigners—English, French and German slides being the only ones to be procured. Of these the English were the best, owing to the incomparable superiority of Chance's glass over all others. They were all ground by hand, and, consequently, came quite high, costing from \$3.50 to \$5, and even \$6 per gross. The Palmer Slide Company of Geneva, N. Y., whose advertisement appears elsewhere, have changed all that, and are now furnishing handsomer and better slides than the best ever imported, at figures less than half of those paid three or four years ago. We can recommend the firm and their products to our readers from personal knowledge.

All for the love of a woman is the motive of the following ; says the *Medical and Surgical Reporter* :

———, ARK., June 14, 1886.—Mr. ———: *Dear Sir*: I will asked you to Sent me ten Cts worth of love Powders this for to Gain the love of a good girl or tell me how to gain the love of a girl or tell me Some way for to gain the love of a girl As the old Saling a Fool for luck so hear i try you for infirmachien give me a trile Beshuar and send me some love powders and also tell me how for to yoused them and tell me if thar is aney thing that a man Can make a girl love a man Remain as yours Truly Respectful

This is well enough, but the unkind part of it is that the *Reporter* says that the letter was sent to a St. Louis wholesale house. What have we done, to suffer this?

The Mystery of Matter ; also **The Philosophy of Ignorance**.

By Allanson Picton. New York ; J. Fitzgerald ; 1886.

To those whose only idea of a possible alliance between modern science and the religious principle consist of the visionary schemes of "reconciliation" of the revelations of science with the gropings of Hebrew mythology, it may seem a bold assertion when we say that there never was at any previous time in the world's history, so marked a tendency to associate the discoveries of science with the emotions of religion, as exists at this moment. But those to whom the most obvious emotions of religion are reverential awe of the great First Cause and admiration of the wonders of Nature's phenomena ; to whom the chief fruits of religion are self subordination, the love of truth for the truth's sake, charity and the love of our fellow creatures—such will gladly allow that Science, as represented by her most distinguished masters, is ever increasingly affected by the inspirations of the religious idea. This view of the relationship between science and religion is admirably illustrated in the two essays before us, and which constitute one volume of that excellent series of publications known as the Humboldt Library. Mr. Fitzgerald deserves the thanks of every reading man for putting such books within the reach of everybody.

Ingluvin.—A very learned name for a remedy is Ingluvin. It is the essential principle of the gizzard, and bears the same relation to poultry that pepsin does to the higher animals. The honor of its discovery and utilization, in its crude state, remotely dates with the Chinese gastronomer, as well as to the Caucasian

chemist, in its refined condition. From time immemorial the inhabitants of the Celestial Empire have used the gizzard of chickens and ducks in nearly all made dishes. Their writers have recommended the practice as a sovereign treatment of dyspepsia, weak stomach and vomiting. From China the practice passed to other parts of Asia, and was adopted here and there among the Mediterranean peoples. Strange to say it was never learned by the great nations of Europe until the latter part of the present century. On the other hand, the organic chemists of Europe discovered, about 1850, a powerful nitrogenous radical in the gizzard. Experiments thereafter showed it to possess many of the qualities of pepsin. These experiments led to its isolation. Numberless experiments have proven it to be a very valuable addition to therapeutics. Where pepsin refuses to act, and where in severe cases it has even been rejected from the stomach, ingluvin effected relief rapidly and with the greatest ease.

In four recent cases of poisoning by root beer (Brooklyn, June, 1886), Dr. George Everson, Jr., is a well known physician of that city, reports that after pepsin and all similar compounds had been rejected by the stomachs of his patients, Inguvin stayed the retching and enabled them to retain and digest food.

Dr. Lassing reports a similar experience in several cases of acute dyspepsia.

Inguvin is prepared by the farseeing chemists, Wm. R. Warner & Co., of Philadelphia. It is made from selected gizzards, and is so carefully extracted as to be free from all foreign organic bodies. It is already known and appreciated by the medical profession. The *American Analyst* bespeaks for it the same appreciation by its readers. We extract the following:

Prof. Roberts Batholow, M. A., M. D., LL. D., in his late work on "Materia Medica and Therapeutics," says:—INGLUVIN. This is a preparation from the gizzard of the domestic chicken—*ventriculus callosus gallinaceus*. Dose, gr. v.—℥ j.

Inguvin has the remarkable property of arresting certain kinds of vomiting—notably the *vomiting of pregnancy*. It is a stomachic tonic, and relieves *indigestion*, *flatulency* and *dyspepsia*.

The author's experience is confirmatory of the statements which have been put forth regarding the exceptional power of this agent to arrest the vomiting of pregnancy. It can be administered in inflammatory conditions of the mucous membrane, as it has no irritant effect. Under ordinary circumstances, and when the object of its administration is to promote the digestive function, it should be administered after meals. When the object is to arrest the vomiting of pregnancy, it should be given before meals.—From the *American Analyst*, August, 1st, 1886.

Hydroleine, See Adv. Page 8.

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THE SAINT LOUIS

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Original Contributions.

THE VALUE OF LISTERISM.*—By ROMAIN J. CURTISS, M. D.,
Professor of Hygiene, College of Physicians and Surgeons of
Chicago., Ill.

From the *a priori* standpoint we may regard the question of antiseptics as settled. It is certainly safer to use antiseptics in all cases of surgery for the reason that, up to date, there is no means of knowing who has an immunity from disease or who has not, and until there is a method of determining this question of immunity no one is justified in neglecting antiseptics or cleanliness either. One might just as well neglect the surgery altogether. From these facts I will venture a prophetic remark; I think the known methods of antiseptics are very deficient, and prevention being better than cure, or at least the failure to cure, I think the future preparation of a patient for a surgical operation will be by inoculation with the isolated poisons of the microbic agents of disease, so as to establish a tolerance of the poisons of this kind before the operation. The surgeon who uses antiseptics has the merit of doing what he can to prevent a possible calamity, and notwithstanding discussions on this subject, the method is making its way, growing and developing as the time goes by. It is impossible, of course, that any surgeon should be able to say that he has prevented, in any given case, an attack of surgical fever, for it is a difficult thing to find out if the germs are there, or the degree of immunity possessed by the patient. But leaving the factor of surgical fever out of the calculation of benefits, the surgeon who uses antiseptics will

*Concluded from the October Number.

be paid for his trouble by the subsequent more rapid healing of wounds, and the absence of pus; not only in incised wounds with their complications, but in the largest and most ragged lacerations.

Now, I speak from experience on this subject and the experience is founded both in hospital and private surgery, as I am surgeon to St. Joseph's Hospital and Joliet Steel Co.; the latter employing from sixteen to eighteen hundred men, and when running at high speed, injuring on an average five men every week. These include the accident wounds—the hospital furnishing railway, stone quarry, wire mills, and surgical cases which are intended to relieve diseases,—cancer, etc. The most notable cases from the steel works are those of lacerated or punctured character, made by instruments that are red-hot or hotter, which gives a very unpleasant complication to a laceration or puncture, or compound fracture. I can safely count on a new case of surgery every day; at least, that has been the rule for several months past, including the burns and scalds. I necessarily have from ten to twenty cases on hand every day, including all kinds of injuries, and I do not see a teaspoonful of pus in a week; nor do I use any soap or water in a wound after the first irrigation, which is done with a syringe without soap or a sponge, but with a 1:2000 solution of corrosive sublimate. I never use carbolic acid, it being a dangerous "remedy" for two reasons. It is a stimulant to the growth and germination of bacteria in a weak solution, and a general as well as a local poison of peculiar aggravation in strong solution. The best antiseptics are hydonaphthol, iodoform, corrosive sublimate, and salicylic acid. Of course, there are a hundred or two more, but these are available.

The two general methods of employing these antiseptics as surgical dressings are first, the usual dressing made up of oiled silk, antiseptic cotton, antiseptic gauze, drainage tube, and ligatures, disinfected hands and instruments. The second method is by antiseptic ointment directly applied to wounds on lint.

The ointment applied very plentifully is certainly a method which prevents the contact of germs with the wound and prevents their germination as well. The ointment as used by me, is as follows:

R.

Iodoform.....	3ss
Hydonaphthol	3ij
Balsam of Peru.....	3ss

Roasted coffee, in powder.....	3 ii j
Cosmoline.....	3 iv
M.	

Make into an ointment.

I will give a few typical cases illustrating the value of antiseptis in surgery.

Mr. Williams, a gentleman from St. Louis, *en route* to Chicago by way of the C. & A. Ry., had a dispute with the boss of the caboose which ended by the brakeman throwing Mr. Williams off the moving train, not "within a mile" of the depot. The gentleman was rescued by the police patrol and carried to the hospital. When I saw him his countenance presented an incised wound, extending vertically in the median line of the forehead from an inch above the eyebrow to near the crown. The left hand was run over by the car wheel, the back and palm of the hand were pulpy, the thumb ground up. A lacerated wound, extending from the fingers on the palm of the hand, peeled the flesh of the palm back, folding it toward the wrist. The back of the hand had two lacerations. The metacarpal bones were broken, and there seemed little chance of saving much hand. The thumb was disarticulated at the carpus, the hand well irrigated and dressed antiseptically. A large quantity of plasma was discharged, making it necessary to change the dressing next day. After this, the hand was dressed with an ointment. At the end of three days nearly the whole hand was suspiciously black, but it improved from this time on. During the repair of this wound there was no inflammation or pus.

Mr. —, a laborer at the Steel Works received a slight scratch on the heel of the left foot. The injury was thought to be too slight for a doctor's interference. Some old lady gave him a cure-all salve, and he took care of the scratch himself for a week. At this time his landlady reported that his leg was black and I was ordered to see him. I found a case of hospital gangrene extending from the heel on the outer side of the leg to the knee. I removed the greater part of the integument and other tissues; took the man to the hospital. The whole outer half of the leg was diseased, and the skin off half way to the knee, the remainder of skin being loose. I have seen considerable hospital gangrene, having spent three years in general U. S. Army hospitals during the war. At first I could think of nothing but bromine, but recovered next day and began to use corrosive sublimate 1:500.

The solution was used with a syringe, inserting the nozzle under the skin, and forcing the fluid to reach all parts. In twenty-four hours the disease was arrested. After this no washes were used. The integument, not already removed, was restored and soon united. A large surface, however, remained without covering. This surface was covered with iodoform, and this by lint, covered thickly with the antiseptic ointment. Considerable plasma and occasionally a little blood discharged from this wound during repair, but I did not see a drop of pus. The wound was not washed with anything—no soap or water or cleanliness of this character. Yet there was very rapid repair.

A Swede, working at a machine in the Steel Company's Works had his arm caught in the machine and lost a good portion of the flesh, including the anterior surface of the forearm. The cavity left by the removal of the skin was as wide as the arm and five inches long. There was no good chance for coaptation of parts and union by first intention. The wound was irrigated with corrosive sublimate solution, and the antiseptic ointment applied. The wound was never washed again and repair was accomplished in four weeks! There was at first considerable discharge of blood and plasma, but no pus found.

A rail straightener in the Company's Works was struck in the posterior left thigh by a red hot rail. The cavity was larger than the end of a railway rail, and extended nearly to the bone in depth. The wound smelled like cooked meat. Irrigation and washing was omitted, it being evident that the wound was practically aseptic. The cavity was kept filled with the antiseptic ointment. The burned flesh came away odorless and without pus, and the cavity filled and repair was accomplished in about a month. There was no pus, but part of the burnt flesh, mixed with ointment, made considerable discharge for a time.

It makes no difference whether the germ theory is true or not, or if antiseptics will prevent surgical fever or not; if germitoxic drugs will expedite the repair of wounds, without the formation of pus, it is a method which certainly is far superior to soap and water.

CHROMIC ACID AND TRI-CHLORO ACETIC ACID IN THE TREATMENT OF
HYPERTROPHIES OF THE PHARYNGO-NASAL CAVITIES.*—By O. F.
BROWN, M. D., Lexington, Ky.

We have found chloro-acetic acid of great use in the treatment of that form of red hypertrophy of the nasal cavity, which has become sufficiently organized to resist mild treatment and is not so far advanced as to require the use of the snare, galvano-cautery or chromic acid. Chloro-acetic acid is easily applied and controlled and is especially beneficial when the hypertrophy is soft and yielding. There is, in such a case, a greater proliferation in the mucous membrane, which is thickened and largely gelatinous, and, owing to the fact that acetic acid readily dissolves gelatinous tissue, these growths rapidly disappear under its application. If too much of the membrane is not permitted to dissolve, the eschar is scarcely apparent.

The best means of applying the remedy is with Sajou's acetic applicator and only the hypertrophied tissue need be touched. When both sides of the nostril are affected, a flat probe bent at an angle of 150° and covered with cotton may be used.

Chromic acid is used in gray hypertrophy and in that form of red hypertrophy where the greatest proliferation is in the sub-mucous tissues and where the whole substance of the growth has become firmly organized. Acetic acid is too slow in its action here. It is necessary to destroy a portion of the mucous membrane to reach the growth underneath. It is doubtful if the spray treatment is of any value in these cases, as it has been tried for five or six months without success.

There is very little sensation of pain in the application of chromic acid, even when cocaine is not used. Precautions should be taken to prevent the eschar from becoming too deep, as chromic acid oxidizes tissues with great rapidity. A good plan is to spray an alkaline solution immediately after its application. The use of this acid is followed by a scar, but an experience of four years has shown no ill effects from it. The scar contracts and is often nearly hidden by the membrane around it, leaving the patient in a much more comfortable condition. The best use to which this

—*Synopsis of a paper read before the American Rhinological Association at St. Louis, Oct. 5, 1886.

acid is put, and the one from which the most immediate benefit is derived, is in pruritic rhinitis (hay-fever). Our theory in regard to this disease is that it is simply a sub-division of hypertrophic catarrh: a form in which the nerves, as well as the mucous membrane and sub-mucous tissues have become diseased. The terminal nerve fibres probably become enlarged and sensitive, as in a sensitive stump after amputation. The destruction of these areas of swollen and sensitive nerve fibres becomes necessary and can be best accomplished by means of chromic acid.

In conclusion, we will say that in mentioning the uses of the acids in the treatment of hypertrophies, we do not wish to convey the idea that this is the only treatment to be used, but wish to call attention to those cases in which we have found it to be of the greatest benefit. We believe where the milder spray treatment can be employed with benefit, it ought to be used.

RHINOLOGY OF THE PAST AND IN THE FUTURE.*—By C. H. VON KLEIN, M. D., Dayton, Ohio.

For us no subject can present a higher interest than an inquiry into the past and a look into the future of rhinology. No research on such a subject can be accounted too minute, no labor too exacting. Progressive as we have been in the past few years, we cannot boast of having revealed the last traces of civilization. When we look back into the history of medicine and surgery we find that rhinology, as a specialty, is not the modern invention that many suppose it to be. Egypt was the earliest home of medical skill, and every mummy, of the more expensive and elaborate sort, involved a process of anatomy, particularly as to its pathological condition, and these interesting pathological specimens were more numerous by reason of the profession being divided into specialties. Herodotus says: (1) Egypt claims the invention of the healing art. The medical practice among Egyptians is divided, and each physician is for one kind of sickness and no more, and all places are crowded with physicians, for there are physicians for the eye, head, nose, teeth, stomach and internal diseases.

—*Abstract of a paper read before the American Rhinological Association at St. Louis, Mo, Oct. 6. 1886.

It was claimed that the best anatomists among these specialists, were those who practiced on diseases of the nose and stomach, or the (2) embalmers. In this process the rhinologists first removed a part of the brain through the nostrils by means of a crooked iron, and destroyed the rest by injecting caustic drugs. The embalming was then finished by the practitioner of the stomach.

Besides embalming, the rhinologists were assigned as executioners of the punishment for adultery, which was inflicted upon adulterers by amputation of the nose. Strabo says: (3) Rhinocolura is so called from the colonists whose noses had been amputated. Some Ethiopians invaded Egypt and instead of putting the malefactors to death, having cut off their noses, they settled them at Rhinocolura. This gave those specialists opportunities for inspecting a vast amount of material, varying in every possible pathological condition. Their reputation was so widely established that Cyrus and Darius (4) sent to Egypt for physicians. The former was afflicted with *polypi nasi*, the latter with ophthalmia.

From all historical accounts it is demonstrated that rhinology was one of the most cultivated specialties in the art of medicine. No doubt rhinoscopic examinations were made by the Egyptians. The use of the mirrors among them was very common.

The treatment in rhinology we may imagine was absurd; yet Herodotus described the treatment by inhalation, fumigation and inspiration of essential oils, just as it is used at the present day. Fumigations were extensively applied in clearing away the mucous incrustations which generally exist in syphilis of the nose. As to the success we are unable to find records thereof. *

* * * * It was not until the beginning of the present century, when the "scopic" method was thought of, that physicians became able to make a correct diagnosis of diseases. Considering the numerous difficulties and the multitude of conflicting theories which had from time to time been promulgated, on account of the parts and by reason of their being hidden from view, the pathological theories of nasal diseases were absurd and unphilosophical. Yet with all its antagonism it has in a great measure unveiled itself before the light of modern investigation and become reduced to a more scientific basis, although we cannot boast that we have opened a new road to medical science.

Our first acquaintance with some sort of an illuminator of the upper respiratory tract, is one mentioned by Loviet, of Paris, (5)

in 1743. In 1803 Bozzini (6) invented a kind of hand mirror for the purpose of examining all sorts of obscure cavities in the human body. In 1827 (7) Senn, of Geneva, proposed to examine the larynx by a small mirror, by inspection into the mouth. In 1829 (8) Dr. Babbington, of London, invented an instrument which he termed glottiscope and also some sort of a tongue depressor of polished steel combined with a mirror. In 1832 (9) Kaslinsky, of Warsaw, invented a combined mouth speculum and gag. In 1835 (10) Plate, of Amsterdam, described a double mirror for the examination of the larynx and pharynx. In 1838 (11) Selligue, a very intelligent machinist of Paris, who was himself subject to laryngeal phthisis, invented a laryngeal speculum consisting of two tubes, through which light was thrown into the glottis and by a counter-glass, which he placed in a peculiar manner, he was able thereby to view his own disease. In 1838 (12) Baunies, of Lyons, demonstrated a laryngeal speculum which cannot be found anywhere described. In 1840 (13) Liston, of London, applied in the larynx, a dental mirror similar to that of Babbington. In 1844 (14) Dr. Warden, of Edinburgh, introduced a contrivance made of an argand lamp for the examination of the glottis. In the same year Avery, of London, is said to have invented a successful instrument, for the purpose of examining the dark parts of the upper respiratory organs. In 1855 (15) Garcia explained in what manner a large reflecting mirror, with a small dental mirror, can be made to exhibit the anatomy and the physiological action of the laryngeal and pharyngeal organs. In 1857 (16) Dr. Tuerck, of Vienna, perfected a laryngoscope similar to that of Garcia's. Through Tuerck's invention of the laryngoscope we are indebted to Czermack for the invention of the rhinoscope.

The rhinoscope evidently brought to light the necessity of inventing the other numerous and valuable nasal instruments. It has lately been discovered that many of the lower respiratory organs could not be healed until the diseases of the nasal cavities were cured. Indeed there is scarcely an organ or structure of the body which is not occasionally affected by the nasal disease. It stands to reason; the nose is the gateway to disease; in nine cases out of ten the causes of human ailments pass through the pathway of the nasal cavities. All diseases caused by exposure, or inhalation, must evidently make their first impression within the gate,—the nose.

The nose is the foundry of a large machine-shop wherein disease appears in its rough casting. The other organs are finishing rooms, wherein the disease appears entirely developed. In fact, the whole human body is comparatively a machine, and such a machine should be handled by different machinists. As all the cogs are connected, therefore there ought to be understood by each mechanic the connection of the entire machine. It is even so with the physician; though he ought to understand every physiological action, and its anatomical connections with every part within the human body, yet, I hold that he ought to practice only a specialty.

I believe that rhinology is one of the most difficult of all studies. It takes more perseverance, patience and assiduity to make a correct rhinoscopic diagnosis, than in all other "scopics." Our late lamented and beloved Dr. Austin Flint gives the following to the world with the last stroke of his pen: "The unavoidable subdivision of medical literature and medical instruction into special departments makes necessary, to a certain extent, specialism in the practice of medicine. * * * Specialism conduces to the advancement of knowledge." Dr. Angell, of Rochester, President of the Medical Society of Central New York, says: "It is an undeniable or self-evident fact, that at the present day medical science has expanded to such an extent that its intelligent cultivation as a whole, by one person, has become impossible." The body of the medical profession should and must "be broken up" into "specialisms." The physician should not remain "a jack of all trades, and master of none."

The illumination by the rhinoscope, the examination by the microscope, the extirpation by the electro-cautery, the inspiration by the spray will make rhinology fruitful and progressive. The day is not far distant when all diagnosis of the respiratory and kindred organs will first be looked after in the upper respiratory tract.

1 Herod., in loco.

2 Herod., II., 86-89.

3 Strabo, XVI, 2.

4 Smith's Dict., p. 1969.

5 Phthisie Laryngee. Paris, 1837.

6 Hufeland's Archiv der Heilkunde. Neue Folge, 18 Band.

7 Gazette Hebdom. de Medecine et de Chirurgie. Paris, 1863 p. 263.

8 Phthisie laryngee, Paris, 1863. p. 177.

9 Woyemic Medicinaky Shornale. Part LXII.

10 Plate Voordragt over das Keelknobbel onderzoeking. Amsterdam, 1836. p. 13.

11 Illustrated by Morell Mackenzie. 3 Ed. London, 1871.

12 Trouseau et Belloc. Paris, p. 180.

13 Liston's Practical Surgery. London, 1841.

14 London Medical Gazette, 1844. Vol. II. p. 256.

15 Gazette Hebdom. de Med. et de Chir. Nov. 1855.

16 Zeitschrift der Ges. der Aerzte zu Wien, April, 1858.

A MIXED FORM OF ATROPHIC AND HYPERTROPHIC CATARRHAL INFLAMMATION, HERETOFORE UNDESCRIBED.*—By P. W. LOGAN, M. D., Knoxville, Tenn.

I have seen a class of cases in which there exists simultaneously hypertrophy and atrophy of the mucous membrane of the nose, nose and pharynx, or nose, pharynx and larynx. Some were apparently so slightly affected, as far as structural changes and other evidences of inflammatory action were concerned, that some observers would conclude that the affected structures were healthy. This mixed form does not present the usual characteristics of either the hypertrophic or atrophic variety of catarrhal inflammation, and the accompanying conditions seem to stop short of either condition as described by authors. The mucous membrane does not appear dry, and yet there is not sufficient secretion to normally lubricate the surfaces, and a dry sensation is complained of. I have seen, in children affected with this form and in which the hypertrophy predominated, an excess of nasal secretion and at the same time, there was a sensation of dryness. The mucous membrane in adults presents the appearance of atrophy, especially in the pharynx, appearing paler, smoother and apparently thinner than the normal, except here and there an occasional inflamed, circumscribed spot of thickened structure with enlarged bloodvessels; and, sometimes, an involvement of the follicles as we see in so-called follicular pharyngitis.

A prominent and, I might say almost pathognomonic, symptom of this mixed form is a tendency to a dry sensation of the nasal, pharyngeal and frequently laryngeal mucous membrane. I have usually found the atrophic element predominating in adults, and in children the hypertrophic. Yet in both, the treatment adapted to atrophic inflammation is, I am sure, the correct one. Astringents are not indicated and, in fact, aggravate the trouble.

——*Abstract of a paper read before the American Rhinological Association, at St. Louis, Oct. 8th, 1886.

There is diminished secretion in this trouble and it is generally purulent in character. Hot, dry air, or an atmosphere containing dust, smoke or other foreign matter, seems to aggravate the trouble, as also overheat from any source. Furnace heat or dry stove heat is especially injurious, as it tends to further increase the dryness of the affected structures.

So far no author has mentioned this form of catarrh, yet it is one which occurs quite frequently. Proper classification of the different varieties of catarrh is important from the fact that we cannot treat them all alike. A hypertrophic condition of the mucous membrane of the upper air passages, accompanying an atrophic condition of the same structure, will not yield to the treatment generally resorted to in uncomplicated cases. Dr. Seiler's assertion that the hypertrophic and atrophic forms may arise independently, or that the atrophic may be a sequel and consequence of the hypertrophic variety, whilst generally conceded, is not a well proven fact.

If these conditions arise separately and independently of each other, the atrophic condition is not always nature's cure for the hypertrophic condition. The etiology of these two diseases seems irreconcilable. The class of cases referred to in this paper, however, stop short of a fully developed atrophic or hypertrophic state with the usual accompanying symptoms, when considered separately.

The point I wish to make is, that we frequently meet with a mixed form of atrophic and hypertrophic catarrhal inflammation. Notwithstanding the accompanying hypertrophy which predominates in children, in order to afford relief, we must adopt a treatment suitable to the existing atrophic condition, regardless of the accompanying hypertrophy. But the treatment must be less stimulating than in a case of purely advanced atrophic catarrh attended with dry, incrustated secretions. The treatment should be mild, soothing, gently stimulating, antiseptic and protective so far as local applications are concerned. I have found the best application to be vaselin containing two to five drops of oil of eucalyptus to the ounce, applied by means of spray tubes. The condition and the effect produced govern the frequency of the applications. One of our best guides in this mixed form is the returning moisture of the mucous membrane, or the lessened dry sensation.

When the dry sensation is relieved and the appearance of the diseased structures improved, I have found it best to discontinue treatment so as to allow the condition to grow well by degrees. If there is a return of the trouble, sufficient treatment is given to put the parts in a condition to improve. It is impossible to re-establish a normal condition in a short time, hence the necessity of following the treatment from time to time. In addition, tonics, laxatives and diuretics will aid considerably in removing the hypertrophied structures and giving nutrition to the atrophied.

Notwithstanding what the authorities say, I am inclined to the opinion that, as a rule, hypertrophy exists prior to atrophy, and that after atrophic changes begin in a hypertrophied structure, the treatment usually resorted to in cases of hypertrophic inflammation, is not suitable for the relief of the mixed form. In other words, remedies directed to the relief of the atrophic condition will not aggravate the accompanying hypertrophy, but will relieve both the hypertrophy and the atrophy. Our treatment, therefore, must be directed to the relief of the atrophic condition always, when atrophy exists, regardless of any hypertrophy that may be present.

THE INFLUENCE OF CHRONIC RHINITIS ON THE MEMBRANA CONJUNCTIVA; Illustrated by a Case.* By FRANK M. RUMBOLD, M. D., St. Louis, Mo.

In the autumn of 1885, Mr. E. B., aged 28, of robust build and dark complexion, consulted me regarding his eyes. He informed me that for the past six or seven years these organs had been almost continuously inflamed, and always in a weakened condition. It pained him to work by gas light, and he could not bear a strong light at any time.

In 1879 and '80, he was under care of an eminent oculist of this city. The treatment was directed *entirely* to the eyes. He received no permanent benefit and during the years 1881 and '82, to use his own words, he "let them alone." During 1883 and '84, he was treated by another eminent oculist but with no benefit.

——*Read before the American Rhinological Association at St. Louis, Oct. 5th, 1886.

Upon inquiry, it was learned that he was subject to dull frontal headaches, a tight feeling between the eyes, and it required considerable will power, at times, for him to fasten his mind upon his work. He also had tinnitus aurium. Examination of the nasal passages revealed the existence of an aggravated nasal and pharyngo-nasal catarrh, or chronic rhinitis. The middle turbinated processes were hypertrophied and so swollen as to be in constant contact with the septum, which latter was also considerably thickened. The larynx was involved slightly.

For the sake of experiment and to definitely determine to what extent the condition of the nasal passages was responsible for the ocular trouble, the treatment was at first directed to his eyes alone, and the usual remedies were employed, with but little, if any, benefit. After a further examination of the nasal passages, the following was the course pursued: The nasal and pharyngo-nasal cavities were atomized with a very small quantity of the oil of eucalyptus combined with warm vaselin. At once an improvement was noticed. After a month's treatment the nasal passages were opened enough to admit of the free passage of air. The patient remarked that the feeling of air passing through his nose was "a novel sensation." He had never noticed previously that he breathed mostly through his mouth. His headaches became less frequent, the tight feeling began to disappear, he did not expectorate so much mucus in the morning, his eyes could bear a stronger light and the redness and burning of the lids began to abate. He could do more work in less time, since his mind was quicker to act.

At the end of the third month the eyes were in a normal condition. The patient noticed no inconvenience from the strong sunlight, nor from working or reading by gas light.

At the present writing, the swelling of the turbinated processes and septum has subsided, and the nose itself, which formerly was of great breadth, has narrowed to almost the proper proportionate width. Only the hypertrophy of the turbinated processes remains, and that, if necessary, can be removed with the Jarvis snare at any time.

COLDS IN EARLY INFANCY; HOW TAKEN AND HOW PREVENTED.*

By H. F. HENDRIX, M. D., St. Louis, Mo.

The most prolific cause of "colds" is a sudden change from a warm to a cold atmosphere, and the subject of this paper is best studied in the lying-in room. We enter and find a temperature of 65° F. The mother is in labor and about to be delivered. The child is occupying a place which registers 100° F. There is, therefore, a difference of 35° between the two. As soon as delivered the nurse washes it, to make it clean, and consumes twenty or thirty minutes in this exercise. The result is that the infant's hands, nose and lips are blue and it shivers, and we soon hear it sneeze two or three times. The nurse assures the mother that they all do it—it's a healthy sign, etc. But we know differently; it is due to the irritation caused by taking cold, and therefore feel solicitous about the tender plant, because we know that the first cold is the first factor in the production of a train of diseases, the most serious of which is nasal catarrh. I say, the most serious, on account of its insidious character and the tenacity with which it clings to its victim, and its position as a stepping stone to other ills.

The process of slopping the child in water is gone through daily and the cold increased; and when the nurse leaves the its mother she also leaves instructions to keep it up, as wi make the child hardy. In this way, are colds taken, and a predisposition left to take them in the future.

We will now pass on to the prevention of taking colds in early infancy, believing that an ounce of prevention is better than a pound of cure. Let us again observe the condition of the lying-in room. We find the temperature to be 65°, and I do not think it too much for the accoucheur to sacrifice his comfort, for the time being. Fuel should be used until the temperature rises to 85° or 90° F. There is still a difference of 10° to 15°. As soon as the child is born it should be wrapped in a soft, woollen shawl or blanket, which has been previously heated to almost a scorching point, having previously anointed it thoroughly with warm lard or vaselin. Place it then in the arms of the nurse, and see to it that she does not let the baby out of her arms for two or three hours.

—*Abstract of a paper read before the American Rhinological Association, at St. Louis, Oct. 7th, 1886.

After this the cleansing process may be proceeded with, by anointing one part after another with warm lard or vaselin, and removing the secretions with a soft cloth. The child is dressed in warm clothes and laid beside the mother. The same thing should be done for the few succeeding days, if necessary. There seems to be an overzealous desire to expose the child's surface when there is really no necessity for it.

Colds are generally not estimated at their true value. Mothers will say that the baby was first taken with a cold, or it is perhaps suffering from croup, pneumonia, bronchitis, or some other serious trouble, which might have been prevented had the monitor been heeded in the first place. Another mother will tell you that the baby always had running from the nose, and its ears are also discharging, and she thinks it was born with it. Another will tell you that it is so easy for her baby to take cold; it was always that way; the first day it was sneezing, and so on, *ad infinitum*.

The explanation is easy from a bacterial standpoint. The mucous surfaces of the respiratory tract have been in an unhealthy condition from the hour of birth. The doors, so to speak, of the mucous membrane have not been properly closed, and the living germ of death has found a nidus from which radiates a condition which could not have been maintained, if the necessary caution had been exercised at the earliest moment of its existence. Much of this neglect, I must say, is not through the ignorance of the accoucheur; but the busy doctor has not the time to go through all these details. He should reflect that it is the life, the health and future comfort and usefulness of a human being which he has in his hands, and should not permit the comparative value of his time to weigh in the balance when duty is involved.

Correspondence.

FOOD SUPPLY THE MEANS OF DISEASE.

EDITORS OF THE JOURNAL:

It has doubtless come within the limits of your personal and professional experience to hear some "wiseacre" dissent from your careful diagnosis, because "such a thing was never known in these parts and we don't see how it could possibly happen," or words to that effect.

The country practitioner constantly meets with some such experience as is framed in the above words, and finds frequent difficulty in obtaining obedience to his far-sighted and beneficial directions.

The cause for this is not remote. The people ask for the visible agent of disease. How did this disease reach or attack this person? The medical man is more concerned with the fact than the mode. It is true that he, too, would like to know all the whys and wherefores of diseases; but his immediate care and aim are to drive out the enemy from its present location; and to this end he at once directs his forces.

The physician realizes the difficulty which hedges about the path of him who would know the causes of the ills to which humanity is heir; hence his seeming indifference to causes beyond his immediate reach. Who can determinately indicate this or that as the real cause of a given attack, in all cases? Not even the wisest!

I have lately been led into this train of thought by the idea that hidden factors of other diseases than those supposed to come from and through the food supply may also be nearly or remotely derived from the same source.

Who would suppose syphilis could so approach one? And yet within the past year I have attended some cases that seem to bear out my deductions, that even that disease may be so communicated.

I have attended cases of persons engaged in branches of the milk business, one of whom suffered from this loathsome disease in a virulent form; and another (also in the suppurative stage) whose hands and arms had suppurative ulcers. In one of these cases, the individual milked the cows and washed the cans in which the milk was delivered to the customers! These were self-inoculating cases. Might they not also inoculate other and healthy persons, under certain probable conditions likely to arise in the natural course of trade and intercourse? I think such a thing reasonable and probable; but am not inclined to be dogmatic about it. I prefer to write this as a suggestive article; thereby hoping to draw out, through your columns, the expression of experience and deduction from those whose superior opportunities and knowledge fit them to speak with authority on this subject.

With respect,

G. F. G. MORGAN,

SAN FRANCISCO, CAL. OCT. 7th, 1886.

1886.]

Editorial Department.

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PROCEEDINGS OF THE MISSOURI STATE MEDICAL SOCIETY.

We are requested by Dr. J. C. Mulhall, Secretary of the Missouri State Medical Association, to state that the volume of proceedings of the last annual meeting (held in this city in May last) is ready, and most of the copies have been delivered. Members who have not yet been supplied can obtain the same by dropping a postal, stating the fact, to the Secretary at No. 2305 Olive St., Saint Louis.

THE PROPOSED STATUTE REGULATING DISSECTION.

It will be remembered that the Missouri State Medical Association at its last meeting adopted a preamble and resolutions setting forth the fact that the existing statute of the state of Missouri on the subject of dissections, and known as the Anatomy Act, "is notoriously inadequate to its intended operation, rather hindering the practical study of anatomy than favoring it," and pledging itself, as representing the medical interests of the State, "to use every means during the remainder of the year to influence

members of the State Legislature to the end that at its next sitting (January 1887) a more satisfactory statute be enacted—one that shall be, at least, not less liberal than such as already exist in other states of the Union.”

The immediate fruit of this action has been the formation of a society composed of representatives of each chartered medical college in Missouri and called the Missouri Anatomical Association. This body has gone vigorously to work in a most practical manner, and has addressed a circular letter to every physician in the state, urging upon him to use his personal influence with the representative from his district in favor of the passage of an act covering the requirements of the case. A draft of such an act accompanies the letter, so that both physician and representative may be thoroughly posted upon the points which it is desired to make.

As each of our home readers (for whom it is especially intended) will receive one of these circulars we do not quote the proposed statute here, but will say that to our mind it is an admirable one. It might with propriety be entitled “an act to promote medical education and to prevent grave robbing.” The Missouri Anatomical Association has our heartiest good wishes, and may besure of our cordial cooperation and support.

“RENDER UNTO CÆSAR,” ETC.

During the meeting of the American Medical Society in this city last May, a mutual admiration club was organized by the editors and representatives of certain medical journals published in various parts of the country, with the very laudable object of keeping each other well before the reading public. The motto of this club was “You scratch my back and I’ll scratch yours,” and the members pledged themselves to copy as much as possible from each other. So far, so well; there is nothing particularly reprehensible in such a bargain. It simply displays a distrust, on the part of the parties thereto, of their individual ability to write and say those things which would be read and copied on their merits alone. Hence it is a confession of weakness which a really capable man would be slow to make and would be ashamed of after it was made.

As for ourselves, we have no objections to being ignored by these parties; but there is something in the shape of a natural sequence to such a compact, to which we do object most seriously, and desire to enter our protest right here, viz: the appropriation of matter from our columns either without credit of any sort, or accrediting it to some member of the charmed circle.

We do not here allude to the occasional appropriation of a paragraph or the use of an item without due credit, as this is something which may happen to the most careful, and when it occurs is usually promptly rectified. It is to the systematic and continuous cribbing and annexation of articles, many of which afterward go the rounds of the press accredited to the cribber, to which we object; and while we have hitherto borne in silence this malversation, one or two instances of late have been so glaring that we are forced to take notice of it. For the present we mention no names but a repetition of the offence will not be treated so leniently.

If the SAINT LOUIS MEDICAL AND SURGICAL JOURNAL does not copy from its cotemporaries (in the usual sense of the words "to copy") it is not because it does not appreciate and admire many of them, but because the scope of the JOURNAL and its limited space force us to content ourselves with original abstracts and condensations of the matter which we desire to reproduce from their pages. We strive to give due and proper credit for all that we thus appropriate, and should we ever fail to do so we hold ourselves ready to make honorable amends upon having the matter brought to our attention.

HYPERPLASIA VS. HYPERTROPHY.

In the papers read before the American Rhinological Association at the recent meeting in this city, and in the discussion which followed, we find the writers and speakers constantly speaking of "hypertrophic" conditions of the nasal mucous membrane, etc., when, from the context, *hyperplastic* conditions were clearly meant. Hypertrophy is defined by Dunglison as "the state of a part in which nutrition is performed with greater activity and on which

account the part at length acquires unusual bulk." Webster says virtually the same, viz: "Hypertrophy is a state of an organ or part of the body, in which, from increased nutrition, its bulk is augmented."

Hyperplasia, on the contrary, is defined as "excess of formative action." The difference, therefore, between hypertrophy and hyperplasia, is that while the former denotes an increase of bulk of preexisting normal elements, the latter means the formation of new elements.

Hypertrophy, when used in the connection referred to above, is therefore clearly a misnomer and it is high time that a body of men so progressive as the American Rhinological Association should authoritatively declare against its use. At the meeting referred to, some of the members, notably Dr. Thos. F. Rumbold, of this city, protested against the continued misapplication of the word (hypertrophy); but no definite action was taken—owing, we suppose, to that conservatism which causes us, as a profession, to cling to many other terms and phrases invented when physiology and pathology were but little understood, and which modern research has shown to be erroneous.

OBSTRUCTION FROM A NEW QUARTER.

We have heard, from pretty reliable authority, that the affairs of the coming International Medical Congress are not proceeding as smoothly as they might. It is a well-known fact that there was established a vigorous movement against the Congress, as a whole. This was a failure. Now it seems that the attack has been renewed and is being directed against the sections. It is said that several of the members of the American Dermatological Association have been guilty of a number of acts which reflect anything but credit upon themselves, either as physicians or as representatives of the profession in America. To state the matter briefly, they first contemplated the formation of an International Dermatological Congress in opposition to the Section on Dermatology and Syphilis of the Congress. This scheme, however, was abandoned and now the idea is to invite all the foreign gentlemen,

who contemplate attending that section of the Congress, to read their papers and hold their discussions in the American Dermatological Association's meeting in 1887. As a matter of fact, the gentlemen who are inaugurating this movement seem to have come to the conclusion that, without their aid, nothing of value can be said or done in dermatology or syphilology, and they think that the method which they have adopted will result disastrously to the Congress. They may be mistaken. This very action will only serve to arouse the friends of the Congress to redoubled efforts and the result may be something far different from what they anticipate.

Looking at the whole thing from an impartial point of view, we cannot but deprecate any action of this kind. To endeavor to sacrifice any part of the honor of American medicine for the purpose of self-aggrandizement or on account of personal feelings or difference of opinion, is not only rash but it indicates a certain amount of malice and should therefore meet with unqualified condemnation.

The American Dermatological Association has done good work and its duty is to aid, with all its might, to make the International Congress a success. There are many dermatologists, not members of the association, who will make every possible effort to do so, undeterred by all obstacles that may be maliciously placed in their way by the small number of malcontents.

We wish to say in conclusion that the obstructionist party will find it a more difficult task to attack the Congress by sections than as a whole. The labor will be so divided that what strength they may possess will have but little force, and will be met with such resistance that they will not be able to do any harm. The Congress will meet here next year and it is of paramount importance that it should be made a success. Personal or local difficulties can be adjusted at some other time. For the present, it is the duty of every intelligent physician to do his best to show the world that we are as progressive and as scientific as our neighbors.

Department of Microscopy.

CONDUCTED BY

FRANK L. JAMES, Ph. D., M. D., President of the St. Louis Society
of Microscopists, of St. Louis, Mo.

Microscopical Records.—Under this name Mr. Chas. E. Alling, of 45 Tremont St., Rochester, N. Y., has recently published a most useful book of blanks, a copy of which lies before us. The pages are divided into sections, each of which bears a number, the latter running from 1 to 500 and intended to correspond with those of preparations or slides. These divisions are ruled off into spaces for the common name, locality obtained from, object and method of preparation, etc.;—the whole, when filled out, forming a very complete record of each mount. Following the part devoted to forms are a number of pages intended for formulæ, etc. A capital index completes the book, which is wide 8 vo. in form, about three quarters of an inch thick, and made of the very best paper and materials. Mr. Alling got it up for his own use originally, but finding it so convenient and valuable he has had a lot made for sale to brother microscopists at a price barely covering cost, viz; three or four dollars, according to style of binding.

Crystals of Salicine.—Some years ago the writer, after finishing a lot of slides of various crystals for examination under the microscope, poured a few drops of a solution of salicine on a piece of window glass and left them to crystalize. Some days afterward, on examining the glass, he was surprised and delighted at the gorgeous beauty of the crystals. Two of the drops had crystalized so that the glass could be cut away into slides and mounted. These two specimens have been shown annually at the meetings of the American Society of Microscopists and have been seen and admired by thousands, not one of whom had ever seen their equal. Words utterly fail to give any idea of their splendor.

"Nothing," said a gentlemen at Cleveland, "short of the Pearly Gates can compare with them." Although during the past four or five years I and my students have made many hundred and even thousands of attempts to duplicate these results, up to very recently these two slides have remained unique. After the Chautauqua meeting, where they were again the center of admiring crowds, I commenced a series of systematic experiments, discarding old methods altogether, and can now announce that I have found a method by which I can get slides, even more magnificent, with absolute certainty, and I have now in my cabinet a dozen, any one of which distances in every respect the old preparations, magnificent and beautiful as they were. I am continuing my experiments with other crystalizable materials and when they are completed will explain the methods by which the results were attained. I will say, however, that the size and the form and method of growth of all crystals yet experimented with, are modified by the temperature at which crystalization takes place; the degree of saturation of the mother liquor or solution, the position in which rests the slip on which crystalization progresses, the medium used for solution and, finally, by the material used for retardation of crystalization.

The Microscope.—This journal under its new management is not merely maintaining its old interest, but gives promise of being even more valuable and indispensable to microscopists throughout the country. The October number, just at hand, contains a description of a new and simple freezing apparatus, by Dr. Frank W. Brown, in which the desired end is obtained by means of Pictet's fluid. The greater portion of the journal is, however, taken up with a condensed, though well written, report of the Chautauqua meeting, A. S. M. The price of the Microscope is \$1 *per annum*, and the address is The Microscope Publishing Co., 83 Lafayette Ave., Detroit, Mich.

Bacillus Tuberculi.—Among the preparations sent me by Dr. J. C. Reeves, of Wheeling, elsewhere alluded to, is a slide of the bacillus of tubercle (Koch,) and I doubt if the distinguished Berlin professor ever saw a preparation to equal it. The bacilli stand out with a clearness that is almost startling, and when examined with a proper magnifying power (I use a one-sixteenth water immersion, B & L. objective and a two inch eye piece)

show details that are rarely seen in other mounts. The doctor will furnish these slides to physicians at one dollar each.

Elegant Preparations.—In the September JOURNAL I alluded to the phenomenal sections of pathological and histological material made by Dr. Reeves, of Wheeling, W. Va. (formerly of Washington, D. C.). Since then I have been the recipient of a half dozen slides prepared by the doctor, and can only add to what I then said that as examples of what such sections ought to be they stand unrivalled by any work ever seen by me. The sections are not only exceedingly thin, but they are evenly so; they are evenly and beautifully stained and are mounted without a wrinkle or a flaw. In the December JOURNAL we will give abstracts of an article on the methods by which these remarkable results are attained. This article was prepared by Dr. Reeves for Messrs. Bausch & Lomb, of Rochester, N. Y., whose microtome is the only one used by him in his section cutting.

MICROSCOPICAL TECHNOLOGY.

XIV. MOUNTING IN AQUEOUS MEDIA.

§ LXXV. Before going into the details of mounting with glycerin, which may be taken as the type of the aqueous media, it will facilitate matters to describe here certain simple forms of apparatus which the student can make for himself and which will greatly assist him in subsequent operations.

(a) **THE GLYCERIN BOTTLE.** This should hold about 2 ounces and should be provided with mouth and delivery tubes fashioned after those of a wash bottle. The mouth or blow tube should be curved in a complete loop before entering the cork, in order to prevent the entrance of dust, etc. A vulcanized rubber bulb, such as is used on atomizers, attached to the mouth tube is a great convenience, but not an absolute necessity. When thus arranged the apparatus forms a little pump which delivers a drop of glycerin at any desired point, and the fluid is in the mean time kept free from dirt and extraneous matters.

(b). *Section lifter.* Take a strip of tin or thin sheet copper,

five or six inches long and three quarters of an inch wide, round the ends and bend it as shown in Fig. 6.



FIG. 6. SECTION LIFTER.

This little instrument will be found useful in lifting fragile sections from the saucer to the slip. When very fragile, the section must be floated from the lifter to the slide by putting a few drops of glycerin on the lifter just behind the section and tipping the former so that its point just touches the drop of glycerin on the slide.

(c). *Reflecting box.* Take a cigar box, seven or eight inches long, six inches wide and two or two and a half inches deep, and remove the top and one of the sides (leaving one side, the bottom and the two end pieces). Into this fit a piece of looking-glass, extending diagonally from the top on the closed side to the bottom on the open side. Finish the apparatus by covering with a plate of good clear glass. The apparatus is almost self-explanatory and will be found invaluable in making minute dissections, arranging specimens on the slide, and in fact any kind of work requiring reflected light. In use the box is placed so that the light, impinging on the surface of the mirror, is reflected upward through the glass cover plate, thus enabling the operator to see the slightest defect or fold in the arrangement of his specimen. The box is greatly improved and enhanced in value by the following additional apparatus, which converts it into a true mounting microscope. Take a piece of wood eight inches wide, one foot long and one inch thick and in one end insert an upright iron or brass rod, one quarter of an inch in diameter and ten inches high. Twist a piece of stout copper wire so that at one end it will form a loop capable of receiving and holding a jeweler's eye-glass, and at the other end attach it to the upright rod in such a manner that it forms an arm four or five inches long which can be slid up or down upon the upright rod. The jeweler's eye-glasses or loupes are cheap and generally made of excellent lenses. I find it convenient to have four of them, of focal lengths ranging from a half inch to two inches, constantly at hand.

(d). *Clamps.* These may be bought ready made for 75cts. per dozen, or they can be fashioned out of good steel hair pins.

Fig. 7 represents the best form of clamp for almost any kind of mounting work. It is self explanatory.



FIG. 7. WIRE CLAMP.

(e). *Cover-glass holder.* Take a piece of brass or copper spiral spring wire, such as is used on bells, and wind it lightly over a bit of cork or other round substance not over an inch in diameter. Fasten it to its place by sticking the ends into the cork and attach the latter to some heavy base which will keep it upright. The cover-glasses, rubbed and cleaned, are inserted between the spiral coils much as pen holders are inserted in the racks made of similar wire more loosely twisted. When the covers are inserted the whole should be protected by inverting a goblet over it.

(f). *Drying papers.* These should be made of the best Swedish filter or the best linen blotting paper, cut into a strips half inch wide by two or three inches long. They should be kept in a tightly covered box, protected from the dust.

The other instruments used in mounting have already been described in our earlier chapters. They consist of straight and curved needles, firmly set in good strong handles, camels-hair or sable pencils, watch glasses, etc. All of them should be clean and free from dust.

§ LXXVI. ARRANGEMENT OF WORK TABLE.—The work-table should be placed in front of a window giving a good light, and removed as much as possible from jar, dust, soot, etc. In St. Louis and in most large cities where soft coal is largely used, these precautions are more easily prescribed than followed. Rapidity and excellence of workmanship in mounting, as in all other mechanical operations, depend a good deal upon a natural aptitude for such work, but more on a proper and convenient arrangement of instruments and facilities, so that no time is lost in putting the hand directly upon the desired instrument or object. These, it is presupposed, are always kept in a proper condition—the knives, needles, scissors, etc., sharp and clean, the cover-glasses and slips thoroughly clean and conveniently arranged, the wash-bottle filled with distilled water, etc.

Directly in front of the operator is his reflecting box, to the

left of which and close by is the bottle of cement. In front of the reflecting box, but placed so that it will not interfere with the light, is the vessel containing the objects to be mounted. To the right is the case containing the glass slips, ringed and ready for use, the cement hard and dry and the glass clean. Near by, in convenient reaching distance, are the glycerin bottle, the wash-bottle, a saucer of clean distilled water in which rests a camels-hair pencil, the little box of drying papers and other conveniences, among which I would especially mention a clean soft linen cloth for wiping slides and a bit of chamois for giving them a final polish.

§ LXXVII. THE OBJECT TO BE MOUNTED having been removed from the fluid in which it was left after section-cutting, is placed in pure glycerin and allowed to remain there until it is permeated. It should be carefully examined with a Coddington lens or magnifying glass to see that it is clean and free from adherent embedding material and other extraneous matter. A glass slip is chosen, with a cell of proper diameter and depth and after being wiped with a moist cloth is dried, and polished with the chamois. Care must be taken that no particles of lint or fibre remain on the surface, either of the slip or cover glass.

The slip is now brought under the delivery tube of the glycerin bottle and receives a drop of glycerin, which should be placed in the center of the cell ring. In doing this it is well to expel a drop or two of glycerin from the point of the tube before allowing any of the fluid to touch the slip, since there is always more or less dust settling around the tube, and which is thus avoided. There is also less likelihood of air bubbles when this precaution is taken. Only a small amount of glycerin is needed, and beginners invariably put many times too much upon the slip.

The object to be mounted is now taken on the section lifter or with the forceps and deposited on the drop of glycerin on the slide; the latter is placed on the reflecting box and here the object is smoothed out and arranged exactly as it is desired it should remain in the permanent mount. If the object be one having one side or edge solid and the other ragged or broken (like a section of certain tumors), it should be placed so that the unbroken side is next the left end of the slip, for the following reason: when the cover-glass is adapted the lower edge, or point is usually carried to the left edge of the ring and let fall toward the right. It thus has a tendency to straighten out and drive toward the right any filaments or parts of the mount that are easily moved.

§ LXXVIII. When the object is one consisting of several parts which must maintain certain definite positions toward each other, but which when in section are held together very slightly or not at all, other precautions must be taken in the preliminary arrangement of the slide. If celloidin has been used as an embedding material the desired end is attained by leaving the section in the embedding mass and mounting it all together. The celloidin becomes entirely transparent when brought into contact with the glycerin, and does not interfere with the examination of the object with the highest powers. Under other circumstances the best device that I have yet found for fixing the objects in position consists in giving the slide a very thin coating of gelatin before placing the object upon it, and adding the mounting fluid only after the object has attached itself lightly to the slide. In such cases the cover-glass must be applied very soon after the glycerin is added or the latter will re-dissolve the gelatin and the work must be done over again.

Air bubbles are gotten rid of by slightly warming the slide and puncturing each one with a hot needle. With a little practice, however, the glycerin may be delivered from the bottle without a particle of free air.

§ LXXIX. CLOSING THE CELL.—Take the cover-glass by the edge between the thumb and forefinger of the right hand, and bring it down at an angle of 45° until the lower edge touches the drop of glycerin in the ring, then carry it (still held at the angle mentioned) horizontally toward the left until the lower edge reaches the center of the cell wall, when the hold should be suddenly relaxed and the cover-glass allowed to fall upon the surface of the glycerin. It will fall gently and if properly done will cause the glycerin to fill the cell smoothly and without a bubble. It can now be shoved gently home, expelling the surplus glycerin as it goes. If when it is in place an air bubble is found within the cell, do not waste time trying to get rid of it. Long experience has taught me that one saves time, temper and material by lifting off the cover-glass, rinsing and wiping it and going through the operation of replacing it *de novo*, after adding fresh glycerin to the mount.

§ LXXX. WASHING THE SLIDE.—When the cover is safely home apply the wire clamp (Fig. 7) to hold it to its place. The slide is now ready for washing, to free it from surplus glycerin. This may be done by a stream from the wash-bottle, directed so

that the water will not be forced up under the cover; or better still, the glycerin may be washed off with a large camel's-hair pencil plentifully supplied with water. This must be done most thoroughly, for upon the absolute removal of the surplus glycerin depends in a great measure the success of the mount. When the last traces are removed the slide is drained and wiped with a clean cloth, care being taken not to touch the cover-glass or clip. The slide (the clip remaining in its place) is now laid flat on the table or mounting box, and with the little drying papers every particle of moisture is removed from around the edges of the cover glass, the paper being passed lightly but firmly around the line of juncture between the cover-glass and cement. To make assurance doubly sure, the slide should be allowed to stand a few minutes before applying the cement which is to seal the cell.

Department of Dermatology and Syphilology.

CONDUCTED BY

A. H. OHMANN-DUMESNIL, A. M., M. D., of St. Louis.

Scarlatina following Injuries and Operations.—The fact that scarlatina and scarlatiniform eruptions sometimes follow injuries and operations, although noted in a few isolated instances, was not fully brought to the notice of the medical profession until Sir James Paget called special attention to it. Since that time, a number of observations have been made and published by different writers. A study of this subject is made by Dr. J. E. Atkinson in the *Journal of Cutaneous and Venereal Diseases* and he says that as the results of his researches, he feels himself justified in concluding that unprotected persons who have suffered injury or who have undergone surgical operations, are rather more liable to scarlatina than the unprotected healthy. This increased liability is probably due to diminished power of resistance from disease, and will probably hold with regard to other specific fevers.

When an epidemic tendency of the symptoms (scarlatiniform rash, etc.) prevails after injuries and operations, it may be concluded with confidence that true scarlatina is present. Septicæmia is occasionally accompanied by a scarlatiniform rash which does not depend upon the scarlatinal poison. Medical eruptions, especially those from cinchona and its preparations, not infrequently follow injuries and operations.

Electrolysis in the Treatment of Lupus.—Dr. Gärtner, assistant to Stricker, of Vienna, has lately reported the successful treatment of lupus by electrolysis. He employs a current of an intensity of five to eight milliampères produced by a battery of twenty-four chromic acid cells. To regulate the current he employs Gärtner's rheostat. The positive electrode consists of a rheophore surrounded by a sponge and fixed to the arm. The negative electrode consists of a curved piece of silver with hard rubber around its periphery. This latter is to avoid cauterizing at the edge of the disc. The current is used ten minutes at a sitting. On removing the electrode the lupus patch is found to be excoriated and a glutinous and strongly alkaline fluid exudes, whilst the normal skin which was beneath the electrode remains intact. After a few hours there are found on the cauterized spots, leathery eschars of a bluish color, and underneath these cure is effected in a few days without suppuration.

Eczema of the Legs.—In an inaugural thesis, written by August Broca on some of the cutaneous lesions of varicose extremities, the author contends that it is a well-known fact that when eczema persistently localizes itself on the legs, varices are almost always the cause. Their presence, and consequently their influence is often disregarded, because there is no search made for the functional signs which indicate the presence of profound varices. Certain local causes come also into play, in addition to varicose veins, in the production of eczema. These are traumatisms, especially when followed by ulcers, the use of irritating topical applications and especially of carbolized water, sometimes the use of flax-seed meal poultices, sulphur baths and, at times, the diachylon plaster. To this might be added a pure rubber bandage, although not frequent. These different causes may be found wanting and then, according to some, the eczema is a trophic trouble due to alterations in circulation and innervation in

the varicose extremities. Besides local causes there is generally a general cause which is, as yet, obscure and which we are obliged to call the eczematous diathesis until we arrive at a more exact knowledge. It is this general condition which has proved such a stumbling block to the therapeusis of eczema. Arthritism has found its advocates as an etiologicoical factor; herpetism has been invoked by others and the "rheumic" diathesis has been brought forward, and the end is not yet.

Does Quinine Produce Purpura.—A number of good authorities have not only contended that quinine occasionally produces purpura hæmorrhagica, but it has been artificially produced by the application of electrodes previously moistened in a solution of quinine. Dr. Frank Woodbury, in a paper recently read before the Pennsylvania State Medical Society, says that, under certain circumstances, we must admit that quinine in ordinary doses may precipitate an attack of purpura in its severest form (*College and Clin. Rec.*) He reasons upon the ground that quinine is a protoplasm poison and exerts its influence upon the capillary vessels, thus obstructing normal diapedesis. It also reduces the vital activity of the white blood cells, and checks their amœboid movements. It has been noticed that the patients have usually been overworked and exhausted, and have complained of chilliness, which may perhaps have been due to spanæmia or poverty of the blood. If quinine produces purpura, the conditions necessary to its production are present but very seldom, for it is well-known to what an extent the drug is taken in the Mississippi Valley and the comparative rarity of purpura. Moreover, the cases of purpura seen, in the majority of instances, are referable to other causes.

Trophoneurosis of Skin caused by Injury to the Median Nerve.—Of late years the subject of the influence of the nervous system, in the production of a number of skin diseases, has attracted quite a large degree of attention. And it is more especially as regards the action of a purely hypothetical set of nerves, the so-called trophic, that observations have been made and efforts directed to establish their etiological significance. Dr. G. H. Tilden reports a case in point in the *Journal of Cutaneous and Venereal Diseases*. A carpenter, about 55 years of age, had his right wrist injured by a circular saw. The wound

healed in about ten days, the scar being about two and one-fourth inches in length and parallel to the long axis of the arm. There came on loss of tactile sense in the last two phalanges of the fore and middle fingers, which has increased. At first, a similar feeling in the thumb existed, to a less degree and has disappeared. Three weeks after the accident a bulla appeared on the terminal phalanx of the index, and since then similar lesions have developed from time to time upon the phalanges of the fore and middle fingers. The bullæ are the size of a pea, their epidermal covering tense, and they are filled with a clear serous fluid. They make their appearance every two or three weeks, rapidly developed during the night and do not increase in size. When several have developed successively in one spot there is produced tylosis. Faradization improved the patient and it was proposed to cut down on the nerve and, if necessary resect it, but he did not return.

Micro-Organism of Delhi Boil.—We have noticed in one of our exchanges that Dr. Cunningham claims to have discovered the pathogenic micro-organism of Delhi boil. He says that it is larger than a lymph corpuscle and varies in shape. It contains a sort of nucleus or nuclear body which has an affinity for staining material. It has been provisionally classed with the monodineæ among mycetozoa. We hope that Dr. Cunningham will now go to work seriously and isolate this organism, cultivate it and endeavor to produce Delhi boil by inoculations; or, establish the truth of his discovery in some way that cannot be disputed. We are being assailed, on all sides, by the discoveries of pathogenic micro-organisms in diseases and are treated to a large amount of theory with but very little fact to support the numerous possibilities which are suggested.

Balsam of Copaiba in Gonorrhœal Ophthalmia.—Some of my older readers will perhaps remember when balsam of copaiba was the remedy *par excellence* for gonorrhœa. It is yet regarded by good authorities as one of the most effectual remedies in that disease. The idea of its topical application in gonorrhœal ophthalmia, however, is quite a new one and some success has already attended its use, as is generally the case with new procedures. We find in the *Medical Record* Dr. S. Haynes reporting that in treating a child, four days old, he found the corneæ covered with thick pus, and the eyelids so swollen that they could be

only separated with difficulty, even under the influence of chloroform. For several days the remedies employed seemed to hold the disease in check, but the child rapidly lost flesh. Applications of balsam copaiba were then made to the temples, external surface of the lids, and above the eyebrows, three times a day, a little being occasionally inserted between the lids. From the commencement of the use of the balsam the child improved and in three or four weeks, the cornea was perfectly free from disease, and the child had gained flesh.

Hæmorrhagic Syphilis.—This rare form of syphilis seems to have been observed but in a very few cases and its identity has even been questioned by a number of reputable authors. Of course, it must not be confounded with the hæmorrhagic form observed in newly-born children. Dr. M. Horowitz details the clinical history of two cases in the *Vierteljahresschrift fuer Dermatologie und Syphilis* and can find no record of cases except those of Bälz. In the cases observed, Horowitz thinks it highly probable that the hæmorrhage took place by diapedesis. Like Bälz, he regards this form as a light one. The effused blood is absorbed in a few days and there seems to be no recurrence. The course of the disease seemed to be ordinary and even mild in the two patients observed. The author very pertinently remarks that, seeing that every pathological change peculiar to the skin is observed in syphilis, from a simple macule to ulcerations and tumors, it would indeed be wonderful if, under the proper conditions, hæmorrhages were not also observed.

The Papulo-Squamous Syphiloderm.—The following clinical picture of this rather common secondary affection is given by Prof. Fournier in the *Gazette des Hôpitaux*. In the first place these papules are clearly and exactly circular as if drawn with a pair of dividers. The color, rosy at first, becomes darker, brownish, finally of a cut ham hue or coppery, but this last only rarely, and when it does exist it is limited to a few papules. When the eruption first appears, the epidermis is intact. Later on, it becomes fissured and covered with scales and detaches itself in small shreds. The papular syphiloderm is always poorly and only partially squamous. The desquamation is meagre and scraping the surface of a papule only detaches small *débris* of epidermis. Oft-times the desquamation is merely peripheral, whilst

the centre is not scaly, and the scales form a narrow, circular whitish or grey fringe. This is what has been called Bielt's col-larette. These scales are formed by a breaking of the epidermis around the papule and they glisten as if varnished.

SHORT TALKS ON DERMATOLOGY.

Under the above Caption the Editor of this Department proposes, in each number of the JOURNAL, to give a short practical synopsis of the principal points attaching to the diagnosis and treatment of some skin disease. No attempt will be made to follow any classification, but diseases will be taken up as they suggest themselves.

XIII. URTICARIA.

This disease is not only well known but of very frequent occurrence. Known commonly as nettle-rash or "hives," there is scarcely a mother who has not ministered to the little ones during an attack. It is a disease whose onset is sudden and whose disappearance is almost as abrupt, as a general rule. It manifests itself in the sudden appearance of wheals, whose sizes vary from a bean to the thumb nail or even larger. These wheals consist of semi-solid elevations, of a roundish form and possessing abrupt edges. They are either paler than the normal skin or they may be of a reddish hue. The lesion is such a well marked and characteristic one that it is easily recognized when of the variety which is pale. After a variable length of time, lasting from a few minutes to a few hours, the wheals disappear and the skin is normal. No desquamation follows the eruption. The subjective symptoms are pretty well marked. These consist of a burning or pricking sensation accompanied by well-marked itching. If scratching is indulged in by the patient, this gratification is very apt to be followed by an extension of the eruption.

In the acute form of the disease attacks occur only when some certain exciting cause produces it and generally it is evanescent in character. When chronic, however, urticaria recurs again and again and the wheals persist for some time after each attack.

There are several varieties of urticaria which are comparatively infrequent. One is characterized by a pigmentation and known as

urticaria pigmentosa. In another, papules form and we have urticaria papulosa. In one form, occasionally seen, there is a certain peculiarity: If the individual's skin be scratched with some blunt object such as a nail or a tooth-pick, wheals form along the superficial excoriations. I have met quite a number of cases of this character.

The eruption occasionally becomes universal and the wheals are distributed all over the cutaneous surface, involving even the scalp.

The diagnosis of this trouble is comparatively easy. It is to be differentiated from erythema, erysipelas, the action of external irritants and from the results following the bites of insects or the application of electricity. Insects frequently produce wheals by their bites, but there is always a minute, hæmorrhagic point in the centre, where the animal's proboscis or sting entered.

The causes of urticaria are varied and numerous, and may be direct or indirect. Direct causes are such as act as external irritants to the skin; whilst the indirect are such as act from within outwards. Among the latter we have febrile disturbances, certain articles of food, such as shell-fish, mussels, oysters, cheese, strawberries, etc., the ingestion of any one of which articles will, in certain individuals, be invariably followed by an eruption of urticaria. Certain drugs, such as balsam copaiba or tolu, or oil of turpentine, will also produce this effect in some. Again moral causes exist, such as fright, anger, grief, etc. Moreover, disturbance of the functions of the sexual, respiratory or digestive apparatus may act as a cause of urticaria, and most commonly it is disturbance in the last that we notice.

The old and young are alike subject to urticaria, males and females being attacked in about equal numbers. It is never, or at least, very rarely accompanied by fever in adults and not frequently in children.

Pathologists have not completely elucidated the points connected with urticaria. A majority claim that it is a reflex vasomotor disturbance, resulting in a sudden, circumscribed exudation which is reabsorbed; or that it is the result of an irritation of the peripheral nerves.

The treatment of urticaria when acute is generally expectant. In fact, the physician is seldom called upon to treat it, as it disappears spontaneously in a very short time. When attention is called to it, the patient should be cautioned against errors in

diet, the bowels should be kept open with salines, and cool clothing, cool rooms and a cool bed enjoined. Where it is dependant upon some internal disease, treatment should be directed to that. Among the internal remedies which are given, when no adequate exciting cause can be found and where attacks recur, is atropine in 1-60 grain doses, once or twice daily. This drug must be closely watched for its effects, however. Hydrobromate of quinine in three grain doses, twice daily, and salicylic acid, not to exceed seventy-five grains in a day are also given with success.

For local use, to allay the itching and irritation, a number of different applications can be employed, such as cold water, hot water, vinegar, whisky, dilute or pure alcohol, solutions of carbolic or salicylic acid, solution of chloral, or ointments containing sedatives. I have used a solution containing a mixture of chloral hydrate and sulphate of morphia, and have also found satisfaction attending the use of chloral-camphor rubbed up in lanolin. Peppermint water is grateful to some patients, whilst cherry laurel water seems to act better upon others. Almost any application, containing a sedative, will act beneficially in allaying the irritation.

Acute urticaria is an affection to which but little attention is paid and it is annoying only when it becomes chronic. In this case, there is generally some underlying or internal cause which must be removed, and unless this is successfully treated the patient will be subject to the eruption for years.

Queer disease for a bald-headed man.—“And so poor Jones is dead” says Brown as he meets Robinson on the street. “Alas, too true! The strangest thing I ever heard of. Marvelous! Astonishing!” answers Robinson. “What is? that he should have died?” “No: his disease. You remember how fearfully bald he was? His head was dead slick—and yet—they say he died of *capillary* bronchitis. It beats me!” (*French Paper.*)

Department of Diseases of the Eye and Ear.

CONDUCTED BY

A. D. WILLIAMS, M. D., OF ST. LOUIS.

Another Enucleation of Ball without Chloroform.—A young man had had a piece of steel in the vitreous chamber for more than 12 months. Most of that time the eye had been painful—at times severely so. The ball had shrunk to about half its normal size. Enucleation was the only remedy, which was done a few days ago. The man was frightened before the operation was begun, but the eye was well cocainized and removed without chloroform. While the operation hurt considerably, it was not severely painful.

Insects in the Ears.—A young man was sitting in Schneider's garden, talking to friends. Suddenly a roach struck him on the ear and ran down into the meatus before he could knock it off. The bug set up at once something like a thunderstorm in the ear and the man, screaming with pain, ran into the nearest drugstore. The druggist had judgement enough to fill the ear with oil and drown the bug and thus stopped the "storm" and the pain. Of course, water would have answered just as well as oil. The right thing to do when any living insect gets into the ear and its movements cause pain, is to fill the meatus full of water and drown it; then the carcass can be removed at pleasure.

Next morning this young man called to see me in regard to the matter. I had only to take hold of the bug's "latter extremity" with the forceps and pull the entire carcass out.

Soon after this a gentleman called with a roach in his ear. It had entered while he was asleep, on the train coming to the city. It soon died, so that it did not cause much suffering. I had no trouble in removing the body, as in the first case.

Two cases of lice in the ear have come under my observation. A young woman complained of feeling something crawling in her

ear. An examination of the ear revealed nothing, but when I syringed it, a live louse was washed out. After this a man called complaining in the same manner, and the result of syringing was another louse. I frequently wash dead flies from the ears of children suffering with otorrhœa, but these two are the only instances where I have found lice in the ears.

Mental Disturbances from the Local Use of Atropine in the Eyes.—As additional evidence that the local use of a solution of atropine in the eyes sometimes causes mental disturbances, I give briefly the facts in two new cases of the kind.*

A healthy boy, æt. 10, had convergent strabismus of high degree. A few days since I made the usual operation for strabismus, cutting both eyes at the same time. As I anticipated, on account of the very high degree of convergency, the effect of the operation alone was scarcely sufficient to straighten the eyes, and to increase it as much as possible I ordered an atropine solution (4 grains to the ounce) dropped into both eyes several times a day. On the following day it was noticed that the boy would address remarks to persons not present, and this he did even when his parents and other children were around him. When addressed he would give rational and proper replies, but would immediately renew his conversations with absent persons. These phenomena disappeared after two days use of the atropine.

Very recently I had occasion to use a solution of atropine, of the same strength as above, in the eyes of a little girl, aged 10, for the purpose of relaxing the focusing power. On the second day after commencing the treatment the child began talking to her brother and sister who were absent, several hundred miles away. She soon became exceedingly nervous and lapsed into a delirium which lasted about twelve hours. The medication was discontinued at noon and on the ensuing morning the child woke up in her normal mental condition. It is proper to add that she had had slight chills for several days previous to the phenomena recorded, but I am confident that the latter were due to the peculiar action of the atropine.

The Origin and Ravages of Trachoma.—Whence came "granulated lids" primarily? An impression has gone abroad, I know not how, that the disease was first introduced into Europe by the army of Napoleon when it returned from Egypt, and that

thence it was brought to America. For this reason, probably, the disease has been called "military sore eyes," "Egyptian ophthalmia" etc. Such a tradition will, however, not stand the test of inquiry for a moment; for while it is true that trachoma is usually propagated or spread from person to person, it can and frequently does arise spontaneously, under conditions that exclude any possibility of contagion. Working in dust, as in handling grain, running through high weeds, or an insect in the eye may excite it. The fact is that it is quite as universal as any of the ills that flesh is heir to, and is probably as old as our race.

But whatever its history and origin, there are few diseases which have wrought such terrible ravages upon mankind. To give an idea of the destruction of vision and suffering caused by it within the last century, I would quote some of the statistics given in an article in the *New York Medical Journal* for September, from the pen of Dr. Andrews of New York:

We are told, says this writer, that 32,000 of the soldiers of the First Napoleon were seized with trachoma. The English troops then in Egypt were also attacked with it, and in the succeeding twenty years the disease spread among nearly all European armies and became, says Larrey, epidemic. In the English army, in 1818, there were 5,000 invalids blind from this disease. In the Prussian army, 1813—1817, from 20,000 to 25,000 men were attacked with this disease, of whom 150 became totally blind, and 250 blind in one eye. In the Russian army, between 1816 and 1839, 76,811 men took the disease, of whom 654 became totally blind, and 878 blind in one eye only. In Italy, of 1500 men with the disease, 97 lost one eye and 49 lost both eyes. In the Belgian army, in 1840, every fifth man had trachoma, and 4000 men lost the sight of both eyes, and 10,000 men lost the sight of one eye (Jungken). In 1848 the disease reached Denmark, where, in Copenhagen alone, of 6171 men, 1156 took the disease (Fuchs). In the Russian army, says Reich, of 50,000 men comprising the army of the Caucasus, 2909, or nearly $7\frac{1}{4}$ per cent., had granular ophthalmia. In the navy the disease is no less terrible in its consequences. From the statistics of the sanitary records we learn that in the Austrian Navy, in 1875, almost every sixth man had trachoma.

While of late years the disease has not appeared in epidemic form in the armies of Europe, it still exists among the soldiers. Many of these, leaving the service while still uncured, emi-

grate to America or elsewhere and thus help to spread the disease in new countries and regions hitherto unaffected. Thus at St. Hubert, in Belgium, says Dastrot, where trachoma is said to have been unknown before, it broke out in a severe epidemic in 1874, after soldiers with the disease had been quartered there, so that during the following year the disease had spread to such an extent that there were hardly any healthy eyelids to be found among the inhabitants, except among the children and aged.

The rapid spread of trachoma by contagion is well illustrated by an incident coming under my own observation and experience.

While living in Cincinnati I was asked to visit an orphan asylum some six miles from the city, to see what was the trouble with the eyes of the children. On examination I found that 150 of the inmates had granulated lids of recent development, and on inquiry I learned that there had been no trouble until a few days previously when a little girl with "sore eyes" had been admitted. From this one child over half the inmates of the institution had become infected within a very few days! This or a similar story might be gleaned from almost every orphan asylum in this and other countries.

A Bug in the Eye causes Granulated Lids and Ulceration of the Cornea.—A young man recently called to see me on account of his right eye, giving this history: "Two weeks previously a hard-shelled bug, as large as a pea, flew into the eye while he was out riding, and it remained there two or three hours before it could be removed, a leg remaining there all night. Acute inflammation at once set in, causing great swelling of the lids and at the same time severe pain, photophobia and lachrymation. After two weeks treatment in the country without benefit, the patient came to the city seeking relief."

I found the lids much swollen, profuse lachrymation, intense photophobia and still painful. The lids inside were badly granulated and intensely red. There were two large ulcers on the cornea, one on the outer and the other on the inner margin. After a tedious treatment of the usual kind, the ulcers healed and the granulations rapidly absorbed, leaving the vision fairly good. In the meantime, the lids of the other eye became granulated and a large ulcer developed on the upper margin of the cornea. Fortunately this ulcer healed promptly under treatment, leaving good

vision. I suspect strongly that the trouble in the second eye was "sympathetic" in character.

I mention this case mainly to show that granulated lids are not alone caused by contagion (actual contact) but may and often do result from any severe irritation, as mentioned above. It is therefore, difficult for me to believe that granulated lids always have a single definite, not to say *specific* cause, which in the language of the present day would be a "microbe" of some kind.

Medical Progress.

THERAPEUTICS.

Ferruginous Hypodermic Medication.—A communication from O. Z. Hirschfeld in the *Bulletin de Therapeutique* goes thoroughly into this form of medication, and a summing up of his conclusions shows that it is a pleonasm, painful and inefficacious. The whole list of preparations of iron, officinal and non-official does not present a single preparation that is suitable to hypodermic medication.

Solanine.—In the *Bulletin de Therapeutique* for September 30th, Dr. A. Geneuil publishes a study of the therapeutic action of solanine. He finds that in all cases where the element of pain is to be combated solanine is preferable to either morphine or atropine, since it possesses analgesic properties equal or superior to these drugs and is free from the dangers and inconveniences inherent in them. Physiologically, it acts upon the bulb, the spinal marrow and the nerve trunks, narcotising them and producing paralysis of the terminal extremities of the sensitive and motor nerves. It may be administered in high doses continuously for indefinite periods, as it has no cumulative action, and therefore, if managed with prudence, is not at all dangerous. It does not seem to produce cerebral congestion in either the very aged or very young, and taken all together it seems to be a most valuable addition to therapeutics.

Turbith Mineral Ointment.—Vigier, who has frequently called attention to the folly of substituting vaselin for lard in making ointments the value of which depends upon cutaneous absorption, now comes out (in the *Gazette Hebdomadaire*) in a caution against the use of lard in making turbith mineral (yellow, or sub-sulphate of mercury) ointment. This ointment was formerly much used and highly prized in the treatment of pityriasis of the scalp, but owing to its tendency to turn black, and its consequent unsightliness, has fallen into comparative disuse. Vigier has found that the change of color is due to reduction of the sub-sulphate by the animal fat (lard) used in the official ointment, and further that it does not occur when vaselin is used as a basis. He therefore recommends the following formula :

Turbith mineral.....	9 parts
Oil of bergamot or citron.....	2 parts
Vaselin.....	144 parts

Mix *secundum artem* and keep in covered porcelain gallipots.

Therapeutic Errors.—Under this title a paper was read before the Congress of German Naturalists recently in session in Berlin, by Dr. Schwarz, of Halle. The author protests, among other things, against the indiscriminate use of pulverulent medications in the treatment of diseases of the middle ear. As to iodoform and boracic acid, both of which have been so highly extolled of late, M. Schwarz declares that they are far from innocuous. He has observed several cases wherein they have produced inflammations of the mastoidal apophyses, some of which necessitated operative interference. Both powders retain the pus and, of the two, iodoform is the most hurtful. Both should be used with caution and closely looked after. The author concludes, further, that whenever the perforation of the tympanum is very small, or situated on top, powders are of no avail. The discussion of the paper was general, and MM. Gruber, of Vienna, Lucae and Trautmann, of Berlin, and Guye, of Amsterdam, confirmed the conclusions and observations of the author.

Rectal Medication by Means of Gases.—The *Gazette des Hôpitaux* says that recent trials of the treatment of *phthisis pulmonalis* first suggested by Dr. L. Bergeon—the introduction of large volumes of medicated air or gases into the intestines by the

rectum, have given results sufficiently promising to cause further experiments to be desirable. In the trials referred to, after having essayed various substances reputed as parasiticide, antiseptic and balsamic, preference was given to the sulphurous gases derived from natural mineral waters. A current of carbonic acid was carried through a sulphurous water, from four to five litres of the gas to each half litre of the water, and introduced into the rectum twice daily. After a few days use there was diminution, and in some instances total suppression of the cough, a profound modification in the quality and quantity of the expectorations, a suppression of night sweats and a general amelioration of the condition, not only in incipient cases, but in cases of confirmed phthisis. A daily auscultation showed that there was a progressive diminution in the humid râles, keeping pace with other convalescent symptoms.

Chloride of Methyl in Trigeminal Neuralgias.—No agent yet used for the relief of trigeminal neuralgias equals in promptness and efficiency chloride of methyl sprayed upon the parts. The writer has for many years suffered with occasional attacks of neuralgia of the trifacial, the attack being generally confined to the left infra-orbital though sometimes affecting the frontal nerves. Everything by turns has been tried and though many remedies have afforded temporary relief none of them lasted long, until the method of spraying with fluids of an exceedingly low boiling point was suggested. Ether, and rhigoline were found prompt and efficient, cutting short an attack and giving long periods of rest. Recently methyl chloride was tried, the result being an instantaneous suppression of pain, and thus far there has been no return. Methyl chloride is a haloid derivative of the paraffines obtained by distilling together sulphuric acid, common salt and methyl alcohol (wood spirit). Under ordinary circumstances it is a colorless gas which condenses under pressure into a fluid with an extremely low boiling point. The chemical, as used by the writer, was manufactured by himself, as it is not yet in the market. Indeed, the difficulties in the way of preparing and using it (the extremely low temperature at which the fluid returns to the gaseous state being the chief difficulty), will prevent the common use of the drug until some special means are devised for its preparation, preservation and application.

PHYSIOLOGICAL AND PATHOLOGICAL NOTES.

Hæmatoscopy.—At the Congress of French Physicians, at Nancy, M. Henocque, resuming his interesting observations on the blood, stated that when the blood contains as much as fourteen *per cent.* of oxyhæmoglobin the latter is reduced in 70 seconds; in other words the tissues consume one-fifth of one *per cent.* of oxyhæmoglobin each second. This quantity should therefore be taken as an unit in hæmatoscopy. The examination of the blood of 175 persons, each representing a series of observations, shows that this rate of consumption varies with the state of the health, the use of certain drugs, etc. It may be increased or diminished by treatment, general or local, and that too, independently of the quantity of hæmoglobin present. These facts have a far-reaching therapeutic significance, and point to the fact that treatment should be directed toward approaching and maintaining the normal standard of activity of reduction.

Demonstration of Typhus Bacillus.—Neuhaus has published in the *Berliner Klinische Wochenschrift* a remarkable memoir on the demonstration of bacillus of typhus taken from the living subject. Forty-eight tubes of sterilized gelatin were prepared and each tube inoculated with blood drawn from typhus patients, under proper precautions. A portion of the inoculations were made with blood taken from parts covered with the characteristic roseola, and the balance with blood drawn from parts where the skin was free from the exanthema. Only three of the tubes became fertilized, forty-five remaining sterile. These three were tubes inoculated with blood from exanthematous skin, and each was from a different individual. After microscopical examination and identification these cultivations were used in inoculating different animals. In each instance the inoculation produced the specific results hitherto described by Simonds and Fraenkel. These experiments are of great value, as demonstrating, beyond a reasonable doubt, the existence of a specific typhus bacillus; but they leave unsettled the question whether this bacillus exists free in the blood, or only at those points covered with the typhus exanthema. Most likely the latter is the true state of the case.

The Venom of Serpents.—Cobric Acid a Myth.—In

1876 a paper was published in the *Journal of Physiology*, by Winter Blythe, in which the author claimed, after exhaustive studies of the venom of the cobra, to have isolated a crystalline principle of tremendous energy, to which he gave the name of cobric acid. He gave drawings of these crystals and from that time until very recently this cobric acid was accepted as the real toxic principle of the venom of the most deadly of reptiles. In the same journal, however, for September, 1886, Mr. R. Norris Wolfenden has a paper on the venom of the cobra which puts a complete quietus on cobric acid and the claims of Mr. Blythe as its discoverer. Following Blythe's method, Wolfenden succeeded in getting the crystals figured by the former; but, on further examination, they turn out to be harmless sulphate of lime. Wolfenden shows pretty clearly that the venom of all deadly reptiles (cobra, rattlesnake, mocassin, viper, etc.) resides in the proteids. As he remarks, the proteid molecule is but little understood as yet, and it is but reasonable to suppose that in some cases its arrangement may produce poisonous bodies. We know that in peptone itself we have a toxic proteid, since injections of this body into the circulation reduce the blood pressure rapidly and remarkably, while the blood loses coagulability (see Schmidt Mulheim, *Archiv f. Anat u. Phys.* 1880, pp. 33-56). Between blood pressure and rapidity of death there is, as shown by Albertini (*Molec. Untersuchungen*, 1881, vol. 12), a certain relation. If the pressure sinks to 50 mm. death follows in a few minutes.

OBSTETRICS AND DISEASES OF WOMEN AND CHILDREN.

Belladonna in Sterility.—A writer in the *New York Medical Journal* says that he has frequently given belladonna internally to women who, although in the best of health and enjoying marital intercourse, had never been pregnant, with the result, in a number of instances, that they shortly thereafter became pregnant. This reminds us of a little story. Mrs. Moneybags was childless and rich; Mrs. Mulhooly was poor and had a house full of young ones. Mrs. Moneybags, in passing Mrs. Mulhooly's shanty, saw the army of kids and forthwith decided to interview Mrs. Mulhooly. "Good gracious," says she "what a lot of babies! what do you live on my, good woman?" "Pratees, mum!"

was the curt reply. "Pratees! why, can you send me some of them?" "Sure an' I *can*; but I'll have ter sind me ould man along wid 'em to make 'em wurruk." Now pratees and belladonna are members of the same family—solanaceæ,—but what's the use of following out the analogy?

Hydrastis Canadensis in Uterine Hæmorrhage.—Prof. Schatz, after an investigation of the statements of Fellner (that the administration of hydrastis had caused uterine contractions in certain animals experimented upon, and that it is consequently an agent to be used with much circumspection where it is not desirable to contract other than bloodvessels), has reported in the *Berliner Klinische Wochenschrift*, that he does not find hydrastis to produce any such effect upon the human subject. He states further, that he finds the drug to be an exceedingly valuable one in hæmorrhages due to myomatous growths the expulsion of which from the uterus would be followed by disastrous consequences, and in those cases where the uterus remains relaxed after the removal of its contents. He recommends it in all those cases of hyperæmia of the genitalia upon which ergot has had no effect or an unsufficient one, and also in cases of pyosalpinx, acute or chronic, in which it is desirable to diminish the hyperæmia without contracting the tubes. It is also useful in peritonitis, oophoritis, etc.

The various white deposits found in the throats of children is the title of a paper by M. J. Simon in the *Union Médicale* of Canada, for September, from which we condense as follows: There is first, the true diphtheritic deposit, false membranes which are deeply adherent to the mucous membrane, penetrating it with long filaments, the nature of which is made apparent by the microscope. They are frequently accompanied by engorgement of the submaxillary ganglions and a slight rise of temperature. 2nd. A pultaceous deposit consisting of epithelial elements associated with mucosities. 3rd. Herpetic products; herpetic and rosaceous vesicles grouped together forming a whitish product, projecting, uneven, soluble in water, and generally in close proximity to transparent vesicles (tonsillitis, the results of colds). 4th. Products resulting from cauterisation with nitrate of silver of granulations, and of ulcerations, syphilitic or otherwise. 5th. Lacteal splotches, found on the tonsils of all

nursing children, and which are simply caseous matter. 6th. Confluent aphthæ or diphtheroidal angina (Lasègue) of children suffering with typhoid, grave bronchitis, or scarlatina, and found at the fundus of the throat, the tonsils and the fauces. These deposits may appear within 24 hours, as in cases of true diphtheria. They may readily be differentiated from the latter, however, by the fact that they are easily washed away. In fine, says Mr. Simon, whenever I am called to see a little patient in whom the diagnosis of true angina is not clear, I say that it is a case of *angina pul-tacea*; that I cannot say with certainty etc. etc., but I take the same precautions and the same care as though I were certain that it was a case of true angina. The child should always be kept in bed.

Prophylaxis against pendulous abdomen.—Dr. Baelz, a German physician practising in Tokio, Japan, asserts that pendulous abdomen as a sequel to frequent confinements, is less frequent among American and English than among German women, but the relative difference is not very great, it being quite common with all of them. With Japanese women, on the contrary, it is rarely or never seen. A woman of this race will, after repeated confinements, still have the abdominal parietes as firm and taut as those of a primipara. Dr. Baelz assigns two causes for this. When, says he, a Japanese woman reaches the middle of her period of pregnancy, according to the custom of her country and with a certain amount of ceremonial, she is girt with a bandage made of a supple but compact material which fits the abdomen snugly and smoothly. This bandage is made so that it can be 'let out' or enlarged as pregnancy progresses, but it is always kept sufficiently tight for it to exercise a very effectual support to the parts—a support much more readily applied since the Japanese women have not yet learned the use of the European corset. The second reason cited by Baelz is the fact that the inclination of the pelvis is less in Japanese than in European women—a fact which also assists the bandage in doing its work. Baelz promises to give measurements which will confirm this portion of his article. The author believes that a similar bandage applied and worn by European and American women during the latter half of pregnancy would be followed by similar results, and hence he recommends it as a prophylactic measure against pendulous abdomen. Bandages properly applied after delivery have a tendency to preserve

the figure, also; but not to the extent indicated by the results attained in Japan. Finally the author suggests for this supporter during pregnancy a modification of the bandage usually applied after laparotomy.

Society Proceedings.

AMERICAN ACADEMY OF MEDICINE.

The tenth annual session of this association convened at Pittsburgh, Penn., on the 12th ult. Delegates were present from all parts of the country. The president, Dr. S. Sutton was in the chair.

The secretary, Dr. Robley Dunglison, of Philadelphia, read a report on the present working laws regulating medical practice in the United States. He said the existing legislation was defective because bills do not receive adequate consideration. The report was a caustic review of the present deficient legislation and its results.

Dr. Frederic H. Gerrich, of Portland, Me., read an essay on "The Best Equipment for Medical Study," in which he recommended the study of languages.

On the second day the following papers were read.

"Duties of Physicians to Each Other," by Dr. Trail Green; "Christian Education for Medicine," by Dr. Andrew Kemper, of Cincinnati; "Is Modern Wound Treatment Scientific?" by Dr. Henry O. Marcy, of Boston; "Treatment and Management of Tubercular Spondylitis," by Dr. Virgil P. Gibney, of New York; "Physical Culture in Amherst College," by Dr. Nathan Allen, of Lowell, Mass., and "What of Young Women?" by Dr. George E. Stubbs, of Philadelphia. In his paper on physical culture in Amherst College, Dr. Allen deprecated overwork, whether in physical or mental culture, but maintained that the highest physical health could be better maintained by gymnastics than by special feats of rowing or ball playing, which only developed special muscles. Dr. Stubbs' paper deplored the physical decay of women. Corsets, high-heeled shoes and trashy novels received

due attention and condemnation.

The following officers were elected for the ensuing year: President Dr. L. P. Bush, Wilmington, Del.: Vice Presidents, Dr. R. Lowrey Sibbett, Carlisle, Pa.; Dr. Sam'l J. Jones, Chicago; Dr. Phineas T. Connor, Cincinnati; Dr. Virgil P. Gibney, New York; Secretary and Treasurer, Dr. R. J. Dunglison, Philadelphia.

The society adjourned to meet in Washington, D. C., the Friday and Saturday preceding the International Medical Congress, which convenes in that city September 1, 1887.

AMERICAN RHINOLOGICAL ASSOCIATION.

The Fourth Annual meeting of this association took place in St. Louis, October 5, 6 and 7, 1886. Tuesday morning, October 5, Dr. A. DeVilbiss, of Toledo, O., the president, called the meeting to order. The secretary, Dr. P. W. Logan, of Knoxville, Tenn., called the roll and was followed by Dr. H. Hendrix, of St. Louis, chairman of the Committee of Arrangements, who delivered an address of welcome. The president then delivered his address, dealing with Rhinology and its position in medicine. Dr. H. Jerard, of East Lynne, Mo., read the first regular paper, his subject being "Necrosis of the Nasal Bones." This paper was discussed at some length. Dr. P. W. Logan, of Knoxville, Tenn., read the next paper on "A Mixed Form of Atrophic and Hypertrophic Catarrhal Inflammation (heretofore undescribed), and its Treatment." This paper elicited quite an animated discussion, and at the conclusion of this latter, Dr. J. W. Fink, of Hillsboro, Ill., read some "Thoughts Relating to the Naso-Pharyngeal Tract." A very short discussion of this paper followed.

Dr. John North, of Keokuk, Iowa, was proposed for membership. Dr. Knode, of the Council, made a favorable report on Dr. North, which was adopted under a suspension of the rules.

Dr. O. F. Brown, of Lexington, Ky., read a paper on "Chromic Acid and Tri-chloroacetic Acid in the Treatment of Hypertrophies of the Pharyngo-Nasal Cavities," which elicited a discussion which lasted until adjournment at 1 P. M.

The afternoon session was called to order at 3 o'clock by the

president. The first action taken was upon the report of the Council which reported favorably upon Dr. A. J. Vance, of Harrison, Ark. Upon a vote he, together with Dr. North, were elected fellows.

The next paper read was by Dr. Carl H. von Klein, of Dayton, O., his subject being "Rhinology of the Past and in the Future." The discussion of this paper turned upon specialism. The next paper read was on "Chronic Naso-Pharyngeal Catarrh as a Cause of Neurasthenia," by Dr. John North, of Keokuk, Iowa. This elicited a lengthy discussion of the subject. Dr. J. R. Van Allen, of Kansas City, then read a paper on "Asthma, its Causes and Treatment." A very lengthy discussion followed the reading of this paper and was followed by the reading of a paper on "Scarification in Nasal Hypertrophy" by Dr. A. G. Hobbs, of Atlanta, Ga., the secretary reading it in the absence of the author. After the discussion of this paper an adjournment was had.

Wednesday morning, October 6th. The association, after hearing the reports of standing committees and transacting some other business, resolved to instruct the secretary to correspond with the proper parties in order to participate in the Congress of American Specialists. An amendment to the by-laws calling for the adoption of the Code of Ethics of the American Medical Association was read and upon a vote was adopted.

Dr. Hendrix, of St. Louis, presented a patient, and was followed by Dr. H. Marks, of St. Louis, who read a paper on a "New Method in the Treatment of Diphtheria." This paper elicited a lengthy discussion. "The Effects of Chronic Rhinitis on the Conjunctiva, Illustrated by a Case," formed the basis of a paper by Dr. F. M. Rumbold, of St. Louis. A long discussion followed, which lasted until adjournment, which took place at 1 P. M.

On reassembling in the afternoon, the session was occupied in the reading and discussion of the following papers: "The Abuse of Uvulotomy and Tonsillotomy; Elongation of the Uvula and Hypertrophied Tonsils; Sequelæ of Chronic Naso-Pharyngeal Catarrh," by Dr. J. G. Carpenter, of Stanford, Ky.; "Colds in Very Early Infancy, How Taken and How Prevented," by Dr. H. F. Hendrix, of St. Louis; and "The Importance of Early Recognition and Treatment of Naso-aural Catarrh," by Dr. N. R. Gordon, of Springfield, Ill.

The last session of the Association took place on Thursday,

October 7th, at 10 A. M. Dr. J. R. Van Allen, of Kansas City, Mo., read a paper treating of the "Effects of Small-pox on the Mucous Membrane of the Superior Respiratory Tract." He was followed by Dr. J. P. Matthews, of Carlinville, Ill., who devoted his essay to the consideration of the question, "Is Hay Fever (so-called) a Disease *per se*?" A lengthy discussion took place concerning the etiology of hay fever. Dr. T. F. Rumbold, of St. Louis, read a paper on the "Treatment of Pruritic Catarrh (Hay Fever)." This paper was also discussed at some length.

The next order of business was that of balloting for the officers for the ensuing year. The following were elected;

President, Dr. J. A. Stucky, Lexington, Ky.; First Vice-President, Dr. C. Von Klein, Dayton, O.; Second Vice-President, Dr. John North, Keokuk, Iowa; Secretary and Treasurer, Dr. P. W. Logan, Knoxville, Tenn.; Librarian, Dr. N. R. Gordon, Springfield, Ill.; Member of Council, Dr. T. F. Rumbold, of St. Louis.

Drs. T. F. Rumbold, J. W. Fink, R. S. Knode and DeVilbis exhibited new instruments.

After installing the newly elected officers, it was resolved to meet next year in Dayton, O., on the last Tuesday in September, 1887, to which date the association then adjourned.

Harmlessness of Mutton.—Owing to the prevalence of scab among the sheep in France, and a fear that the use of mutton might carry germs of the disease to human beings, M. J. Chatin has made an exhaustive study of the disease and communicated the results to the Academy of Medicine (of Paris) at the séance of Sept. 28th last. This disease appears to be due to *cysticercus (c. ovis)* and from *a priori* reasoning, it was but fair to conclude that the flesh might produce a form of *tænia* in those who used it. This conclusion seemed to be strengthened by the fact that in Algeria, where mutton is very largely consumed, tapeworm is very prevalent. The researches of M. Chatin seem, however, effectually to dispose of this argument. The *tænia* said to be produced by the *cysticercus ovis* is *tænia tenella*, the existence of which in man has not been clearly proven. In fact it is extremely doubtful if a single one has ever been observed. The *tænia* prevalent in Algeria is the *t. medio-canellata*, or the tapeworm derived solely from beef. M. Chatin concludes that the fear of mutton is groundless and that it may be used *ad libitum*.

Book Reviews.

The Modern Treatment of Eczema. By H. G. PIFFARD, M. D. 12 mo. pp. 54. Detroit, Mich. Published by Geo. S. Davis. The Physicians' Leisure Hour Series. Price 25 cts.

The importance of eczema among affections of the skin is well exemplified in the number of monographs which are devoted to a consideration of that disease. In the present brochure we are given an excellent clinical description of the various forms of eczema, as well as excellent advice in the management of the disease. Dr. Piffard's views on the etiology of this affection have long been known and the following extract from the little work under consideration will perhaps best show his position in that respect. He says (p. 10): "Eczema depends on a constitutional derangement or diathesis, hereditary or acquired, and of indefinite duration." He contends that there is a retention and accumulation of a certain amount of excrementitious substances which he believes to be in the main uric and oxalic acids, with probably other less known products of imperfect oxidation. Of course, he admits that there are local exciting causes, but there must exist a predisposing cause. He devotes considerable attention to the general treatment or rather management of the disease and closes this interesting little monograph with the special treatment of various forms and varieties of eczema.

A. H. O-D.

The Use of Electricity in the Removal of Superfluous Hair and in the Treatment of Various Facial Blemishes. By GEORGE HENRY FOX, M. D. 12 mo. pp. 67. Detroit, Mich: Published by Geo. S. Davis. The Physicians' Leisure Hour Series. Price 25 cts.

This little book consists chiefly of a compilation of articles published, by the author, in medical journals during the last few years, bearing upon the application of electricity to the treatment of various skin troubles. This places the material in a much bet-

ter shape to attract attention to a subject which is becoming somewhat important on account of the results which have been achieved. Dr. Fox introduces his subject by a few preliminary remarks on electrolysis and then speaks of the permanent removal of hair by electrolysis. He very correctly concludes that the best needle for this purpose is a jeweler's steel broach. A point to which I referred in the JOURNAL, some time ago, he mentions on page 19, viz: "In other patients the fine hairs are constantly growing larger and darker, and after the most conspicuous have been removed a new growth will in time succeed, and appear, perhaps, like a return of those previously removed." He next considers the treatment of wine mark by electrolysis and I can testify to his statement that it produces marked improvement. The use of the electrolytic needle in telangiectasis, angioma, nævus pigmentosus, fibroma simplex, and xanthoma is recommended as also electricity in the treatment of acne simplex and rosacea.

A. H. O-D.

Traité Élémentaire d' Anatomie Médical du Sytème Nerveux. Par CH. FERE. (A. Delahaye et Lecrosnier editeurs.) Paris, aux Bureaux du Progrès Médical, Rue des Carmes, 14. 1886. 8vo. pp. 495.

In the volume before us the author has presented us with the practical results of his labors for years past as chief of the anatomo-pathological laboratory of the clinic of diseases of the nervous system at the Salpêtrière,—M. Charcot's wonderful clinic, the reports of which comprise some of the most remarkable revelations concerning mental and nervous phenomena ever made by man.

The object of the work is to present a complete exposition of our present knowledge of the nervous system as viewed from a purely medical stand-point:—in other words it is a résumé of the descriptive and topographical anatomy of those nerves whose functions and relations to pathological troubles have been established with certainty. It is, therefore, an effort to do for medicine what similar works have already done for surgery; and although from this self imposed restriction necessarily incomplete, it has the merit of being the first work of this description ever written.

The book is divided into two parts, the first of which, and by

far the largest, is devoted to the anatomy of the central nervous system, while the second is a similar, though less extended study of the peripheric nerves. The descriptive portions of the letter press are very lucid and are greatly assisted by the numerous wood cuts which abound throughout the book. A large number of these illustrations are from original drawings by the author, most of which are from pathological specimens. The balance are from works by Charcot, Nothnagel, Dubois-Raymond, Erb, and Heitzmann.

Take it all-in-all, we do not know of a better book to put into the hands of the advanced medical student or the practitioner interested in nervous diseases, and we sincerely hope that some one will prepare a good English translation of it at an early day. Such a work should have an excellent sale as a text book in our medical schools.

Like all the publications emanating from the *Progrès Médical*, the typography and paper are superb, and the index (that weak point in most French and German medical and scientific books) is full and accurate.

F. L. J.

A Manual of Dietetics. By J. MILNER FOTHERGILL, M. D.
EDIN. 8vo. pp. 255. New York, William Wood & Co., 1886.
Price \$2.50.

Taking as his text the wise old saw—"what's one man's food is another man's poison," Dr. Fothergill has given us here, a book as full of good, hard sense, of wit, humor and pathos, as is an egg of the nutriment of which he writes so well and so delightfully. His preface is a short one: The day of dietetics, he tells us, has arrived. Modern advances in the knowledge of the physiology of digestion have been accompanied by a similar progress in the preparation of food, and the value of feeding in disease is now admitted to be quite as important as the administration of medicines. How this feeding should be done—how the food should be prepared and how administered, is the subject matter of the book before us.

The author has divided his work into two great parts or sections. The first treats of food in general, its nature and object; the various forms of food and their digestion; the methods of preparing foods; of condiments, beverages and stimulants; of fluid,

preserved, canned and prepared foods; and finally of the artificial digestive agents (pepsins and pancreatin) and foods upon which they have been made to act (predigested foods).

The second part takes up the foods required in different pathological and physiological conditions, and at varying times of life—in infancy, adolescence, adult life and old age; in acute disease, convalescence, struma, anæmia etc. This part of the work consists of thirty-three chapters, each of which is devoted to the consideration of the foods and feeding adapted to some one especial condition.

The style of the book is most fascinating. Open it where you may, the eye will light upon a paragraph that will attract the attention and force you to read further. With a vast and seemingly inexhaustible fund of anecdote and folk-lore at his command, Dr. Fothergill illustrates a point by a story, sometimes funny, sometimes pathetic, always good, or he clinches an argument by a proverb. Nothing could be further removed or more delightfully different from the style traditionally affected by medical authors in general, and British medical authors in particular. In going through his pages the reviewer is constantly halted in his necessarily hasty examination and (unpardonable sin!) actually *reads* the book that he intended simply to review.

It would be pleasant, did we have the space, to make some quotations better to illustrate the nature of Dr. Fothergill's work. As it is, we can only say that he who fails to get it and read it, not only fails in his duty to his patients and himself, but robs himself of a most delightful treat. If the time is indeed at hand, as stated by the author in his preface, when systematic lectures on food will be a part of medical education, we can imagine no better text book to put into the student's hands and with which to supplement these lectures, than Fothergill's *Manual of Dietetics*.

The mechanical execution of the work is on the whole good, though we notice a few evidences of careless proof reading. The paper and print is all that could be desired.

F. L. J.

[Nov.,

Books and Pamphlets Received.

The following is a complete list of Wm. Wood & Co.'s library for 1886, so far as issued:

Diseases of the Spinal Cord. By Byron Bramwell, M. D., F. R. C. S. (Edin). Fifty-three colored plates and one hundred and two wood engravings. Second Edition, pp. 298. (January.)

Insanity and its Treatment. Lectures on the treatment medical and legal, of insane patients. By G. Fielding Blandford, M. D. Oxon. Third Edition. Together with TYPES OF INSANITY. By A. McL. Hamilton, M. D. pp. 379. (February.)

Handbook of Practical Medicine. By Dr. Herman Eichhorst. Vol. I. Diseases of the circulatory and respiratory apparatus. 103 wood engravings. pp. 407. (March.)

The Genuine Works of Hippocrates, translated from the Greek with a preliminary discourse and annotations. By Francis Adams, LL. D., Surgeon. Vol. I., pp. 393. (April.)

Diseases of the Stomach and Intestines. A manual of clinical therapeutics for the student and practitioner. By Prof. Dujardin-Beaumetz. Translated from the fourth French edition by E. P. Hurd, M. D. Illustrated and one chromo-lithograph. pp. 389. (May.)

Handbook of Practical Medicine. By Dr. Herman Eichhorst. Vol. II. Diseases of the digestive, urinary and sexual apparatus. 106 wood engravings. pp. 361. (June.)

The Genuine Works of Hippocrates, translated from the Greek, with a preliminary discourse and annotations. By Francis Adams, LL. D., Surgeon. Vol. II, pp. 366. (July.)

A Treatise on Electrolysis and its applications to therapeutical and surgical treatment in disease. By Robert Amory, M. D. pp. 307. (August.)

Rheumatism, its nature, its pathology and its successful treatment. By T. J. MacLagan, M. D. pp. 277. (September.)

The typographical portion of these works is far ahead of the previous numbers. They are neatly bound and will be an ornament to any library. The several authors' names speak for their worth.

How We Treat Wounds To-Day. By R. T. Morris, M. D. Second Edition. pp. 165. [New York and London, G. T. Putnam's Sons; St. Louis, J. L. Boland, 610 and 612 Washington Ave., 1886.]

La Vie Universelle et la Rage.—Par Hubert Boëns. Charleroi, 1886. [An antivaccination blast at Pasteur and his methods.]

Method in Medical Study.—By Charles H. May, M. D. Reprint from *The New York Medical Journal* for Sept. 18th, 1886.

Transactions of the Medical Association of the State of Missouri at its annual session held at St. Louis, Mo., May 3rd. 1886.

Des Cataractes et de leurs Opérations; Conférences cliniques professées par le Dr. Boucher. Paris, aux Bureaux du Progrès Médical, 1886.

Modern High Farming;—A treatise on Soils, Plants, Manures etc. By Francis Wyatt, Professor of Agricultural Chemistry etc. New York, C. E. Bartholomew, 1886.

The Mechanism of Indirect Fractures of the Skull.—By Charles W. Dulles, M. D. Reprint from the Transactions of the College of Physicians of Philadelphia. Philadelphia, P. Blakiston, Son & Co., 1886.

A Manual of Animal Vaccination, preceded by Considerations on Vaccinations in general. By E. Warlomont, M. D., of

Brussels, Belgium, and translated by Arthur J. Harries, M. D. Philadelphia, John Wyeth & Brother, 1886.

Medical Communications of the Massachusetts Medical Society, vol. XIII. No. 5, 1886; containing the annual discourse, ("The Undercurrents of Modern Medicine") by Richard M. Hodges, M. D., of Boston, and the following papers, viz: "The Abuse of Medical Charity," by Fred F. Doggett, M. D. "The Management of Cases of Rigidity of the Os Uteri in Labor," by W. E. Boardman, M. D.; "A Not Well-Recognized Source of Domestic Poisoning." By Charles Harrington, M. D., of Boston. An Epidemic of Malaria in Eastern Massachusetts. By Zabdiel B. Adams, M. D., of Farmingham. Abdominal Cellulitis. By Julian A. Mead, M. D., of Watertown. The Causation and Treatment of Lateral Curvature. By Edward H. Bradford, M. D., of Boston. The Etiology and Treatment of the Summer Diarrhoea of Infants. By Henry C. Haven, M. D., of Boston.

Melange. .

Dr. A. Wolf has been named professor of dermatology at Strassburg, vice Dr. Weiger, retired.

Dr. Briau, chief librarian of the French Academy of Medicine since 1855 and a distinguished Greek scholar, died lately.

It is reported that Prof. von Arlt, of Vienna, is suffering with gangrene of the leg and that his condition is serious.

Dr. Pagenstecher recently operated successfully upon Prof. von Langenbeck, the well-known German surgeon, who had cataract.

The French Association for the Advancement of Science has chosen the city of Oran for its next Congress in 1888. Its next annual meeting will be held in Toulouse.

The medical profession, of Atlanta, Ga., is making stren-

uous efforts to have a hospital established in that city and are going to petition the municipal authorities to build one.

Phosphorus-necrosis of the jaw, says the *Medical and Surgical Reporter*, is becoming quite common in England, in consequence of self-prescription of phosphorus as a brain renovator.

Egypt has but one medical journal, *El Shifaa* (The Cure), which is published monthly and meeting with moderate success financially. Its contributors are natives chiefly, and the papers are good.

A number of medical journals have inaugurated a war upon the Jefferson Medical College, and the Dean is replying. As a result of all this, the College is obtaining a goodly amount of gratuitous advertising.

The vital statistics of France, during 1885, give the following totals: Population (estimated), 28,030,316; births, 922,361; deaths, 836,897 (exclusive of still-births, 43,958); marriages, 283,170; and divorces, 4,227.

In Syria the most frequent disease, says the *New York Medical Record*, is malaria, and after this syphilis, which especially affects Mohammedans. Pulmonary emphysema is common as a result of excessive smoking.

The Academie de Medecine of Paris, among its many prizes, offers one for an essay which will establish by a series of observations a method of treatment which will abort syphilis the diagnosis of which has been confirmed.

We have noted that a number of our esteemed cotemporaries are following in our wake, by devoting departments to skin diseases and to microscopy. It is time that these hitherto neglected departments of medicine be given prominence.

Dr. D. N. Kinsman reports a case of chancre of the gums, in the *Cleveland Medical Gazette*. He says the sore was contracted from kissing a woman who herself was inoculated by means of a crayon of nitrate of silver applied to the lip for a simple fissure.

Another Victim to Professional Duty.—The French medical journals announce the death in Paris recently, of M. Jean Dussaud, a young interne of the Hospital for Indigent Children, who perished from diphtheria contracted from his little patients. He had but very lately been assigned to the department of diphtheritic diseases, and had displayed great devotion to his charge

The Cat and the Medical Student.—A virtuous Thomas Cat met a diligent Medical Student on the Stairs of a Dissecting Room. "I am going" said the Cat "to sit up and mew till late to-night." "So am I," answered the Medical Student. "And then I shall go and rat a little" added the Thomas Cat. "Me too, Pete!" exclaimed the laborious Student. *Moral.* This Story teaches us that virtuous Thomas Cats and Diligent Medical Students have much in common.

At the last meeting of the American Gynæcological Society the following gentlemen were elected officers for the ensuing year: Dr. A. J. C. Skene, of Brooklyn, President; Dr. J. C. Reeve, of Dayton, O., and Dr. Ellwood Wilson, of Philadelphia, Vice-Presidents; Dr. J. Taber Johnson, of Washington, Secretary; Dr. M. D. Mann, of Buffalo, Treasurer; Dr. W. H. Baker, of Boston, Dr. T. M. Drysdale, of Philadelphia, Dr. C. C. Lee, of New York, and Dr. A. Reeves Jackson, of Chicago, Members of the Council.

The total number of Jews in the world, according to *Le Lyon Médical*, is 6,300,000. Of this number Europe contains 5,400,000; 300,000 live in Asia, 350,000 in Africa and 250,000 in America. Oceanica, including Australia is credited with only 12,000. These figures are said to be trustworthy and agree closely with those of the *Annuaire des Archives Israelites*, but for all that, we believe that they are far below the mark. The United States, for instance, is accredited with only 230,000, leaving only 20,000 for Canada, Mexico and the whole of South America.

The patent medicine trade of the United States, says the *American Lancet*, is rated at \$22,000,000 annually. Of this \$10,000,000 are spent in advertisements. Still on what remains there is said to be a net profit of \$5,000,000. What would the newspapers do without these \$10,000,000 which they receive from

this traffic? The humanitarian inquires what would the undertakers do for business if the enormous amount of drugs here represented could be kept from the people? Surely this would be a sanitary movement the beneficent effects of which none can estimate.

Bichloride of Mercury in Diarrhœa.—M. Blondeau having recently tested Gueneau de Mussy's method of treating pseudo-membranous or gelatinous diarrhœas, both acute and chronic, by means of small doses of corrosive sublimate in alcoholic solution, was so pleased with the results that he communicated them to the *Journal de Médecine de Paris*, with high encomia of the method. The solution used is 1:100, and of this the dose for an adult is three minims, given thrice daily. At the end of five or six days the treatment is interrupted for one day, on which the mercury is replaced by a saline cathartic—a spoonful of Carlsbad salts, a glass of Hunyadi Janos or Friederichshalle bitter water, or a dose of Glauber salts. If necessary, the mercurial treatment is resumed after the salts have operated and is continued for another period of 5 days, when the saline purgative is again resorted to. If from any cause it becomes necessary to stop the use of mercury, its place may be taken for a few days by euonymin or podophyllin. This course of medicine is a valuable one in those cases where habitual constipation alternates with gelatinous diarrhœa. It will be remembered that Dr. Sidney Ringer, a number of years ago, highly recommended the bichloride of mercury in minute doses for the treatment of acute and chronic dysenteries. In certain forms of dysenteric diarrhœa the drug acts like a charm.

Moxie.—For some time past the soda fountains and bars of the country, from Maine to the Gulf, have glistened with placards advertising the virtues of a certain nostrum with the suggestive cognomen of *moxie* and which purported to be a "nerve food" of the most exalted and wonderful character. Our valued contemporary the *American Analyst*, with its usual enterprise, got after the new and wonderful 'pick me up,' and denounced it and its proprietor, one "A. Thompson, M. D.," as frauds of the first water. Thompson resorted to efforts to bluff the *Analyst* but without success. Dr. Lassing, the editor of the *Analyst* submitted the question to Prof. Wyatt, who made a most exhaustive examination of the nostrum and reported that it consisted of an

infusion of sassafras, gentian, checker berry and quassia, with a small percentage of alcohol. Mr. Wyatt's report to the *Analyst* concludes with these words: "It will be seen that there is an utter absence of any alkaloid, or of any active principle of any drug, or vegetable, or herb, recognized by or known to the sciences of chemistry or medicine. If the preparation had contained any vegetable substances such as is claimed for it, the above analysis would have shown it by the discovery of some alkaloid or essential oil."

From what we know, personally, of Prof. Wyatt and the editor of the *Analyst* we are satisfied that, if anything, the proprietor of the nostrum has been treated only too leniently by them. The *Analyst*, by the way, is continually doing most excellent work in exposing frauds of this kind.

Local Medical Matters.

Dr. F. Winckel, Professor of gynæcology in Munich, paid St. Louis a flying visit during the latter part of October.

The St. Louis Medical Society was organized in December, 1836, fifty years ago. There has been some talk of celebrating its semi-centennial anniversary.

Miss Dr. McLean, the only female member of the St. Louis Medical Society that was ever elected by that body, is beginning to attend the meetings.

We have been informed, with how much truth we are not prepared to say, that enforcing a three years' course of lectures in a medical college, has proved anything but a "howling success" in St. Louis.

There have been vague rumors afloat to the effect that another monthly medical journal would be located here sometime in the near future. It will doubtless be issued with the object of "filling a long felt want."

It is whispered that there are some medical colleges that are not profitable institutions. But there is the satisfaction of knowing that in disseminating science, "virtue is its own reward" and about the only one too.

There are twelve Medical Colleges, in the State of Missouri, whose diplomas are recognized by the State Board of Health. The number of wildcat institutions that are forever cropping out, on paper, cannot be estimated. Is it not about time to call a halt?

What would You have done?—A few nights ago a physician was summoned in hot haste to go to a neighboring restaurant to see a woman who had been brought in there by a male companion, and who was said by the messenger to be suffering with violent crampings of the bowels. On arriving at the place the doctor was ushered into a private room, entirely dark except from a little diffused light which struggled in through the shutters from the street lamps outside, and was told that his patient was in there—a fact of which, however, he was assured by the dismal groans that came from the darkest corner. On asking for a light he was curtly informed by the gallant that it would not be allowed, and that he must treat the patient in the dark or not at all. He thereupon turned on his heel and left—not until he had presented his bill for a night visit and which was subsequently paid by the landlord, presumably for the male companion of the woman.

The conduct of the doctor in refusing to have anything to do with the patient under the circumstances, has been criticized by certain physicians to whom the affair was related. We would like to have the opinions of our readers on the subject.

We have received from Dr. C. H. Hughes, Editor of the *Alienist and Neurologist*, but unfortunately too late for this issue of the JOURNAL, a very valuable and interesting paper on the "Cure of Scrivener's Palsy by Induced Static Electro-massage." It will appear in our December number, and we bepeak for it that careful reading which all of Dr. Hughes' papers merit. This treatment of this disease (scrivener's palsy, writer's cramp) hitherto considered so intractable, has been singularly successful in at least one case of which we have personal knowledge.

Vital Statistics of Physicians as a Class.—From a "blue-book" recently issued by Dr. Ogle, superintendent of the Statistical Department of the Registrar General's Office (English) the *Union Médicale*, makes a most interesting condensation on this subject, from which we extract as follows: Contrary to general opinion physicians, in English speaking lands at least, do not share in the longevity accredited to professional men of other estates—lawyers and parsons. Not only is the rate of mortality among physicians very high, but it is augmenting from year to year. From 1880 to 1882 the co-efficient of death rate among them surpasses that of every other profession, the figures being 25.83 for physicians against 20.23 for lawyers and something less for clergymen. While this co-efficient is less than that of miners and some few of the more unhealthy of the trades, it is much higher than the rate among tavern-keepers, brewers, butchers, brick and stone masons carpenters—in fact the larger part of the handicrafts. If we take the causes of death of a million of men at random, and compare the relative death rates from special diseases, we find that in scarletina the figures are 59 physicians against 16 of any other trade or profession; in typhus the proportion is 79 to 33; in diphtheria 59 to 14; in typhoid 311 to 238; in alcoholism 178 to 130. The statistics of suicide are also against us 368 to 238! The greater part of suicides among physicians used poison as a means of shuffling off the mortal coil. Fifty per cent. of the profession suffer to a greater or less extent with hepatic troubles *en rapport* with gastro-intestinal disorders caused by irregular habits in eating and drinking. In one single disease only do they seem to have an advantage—in small pox. The lowest rate accredited to any other profession or trade in this disease is 73, while we find doctors put down at 60, a fact which proves that we believe in and practice vaccination. These results bear eloquent testimony to the dangers and hardships that beset the path of the physician.

Epidemic Diphtheria.

As the last form of the JOURNAL is going to press we learn that the Board of Health of St. Louis has declared diphtheria to be epidemic in the northern, western and southern parts of the city,—the central and business portion remaining singularly free from all traces of the disease. The Board is taking most stringent measures to confine and stamp out the disease, a work in which every city physician is interested and to which he will lend his hearty support.

Hydroleine, See Adv. Page 8.

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THE SAINT LOUIS Medical and Surgical Journal

VOLUME LI.—December, 1886 — No. 6.

Original Contributions.

M. PASTEUR AND HIS TREATMENT FOR RABIES.—Extract from Log Book of France. By G. M. B. MAUGHS, M. D., of St. Louis, Mo.

Paris, May 17th, 1886.—Had to-day the great good fortune to attend the clinic of M. Pasteur, at the Ecole Normale, being introduced by my friend Dr. Warren Bey, an eminent American physician now practicing here in Paris. Dr. Warren was knighted by the Sultan for his services in the Egyptian Army, and is also a fellow of many of the learned societies of Europe. He was not personally acquainted with M. Pasteur, but in order to introduce me, as well as to see Pasteur and learn something of his discovery, he procured a letter of introduction from Professor Charcot, Physician in Charge at the Hospice de la Salpêtrière. This procured us ready admission to the clinic, where we saw one hundred patients treated for mad-dog bites, without being much the wiser for our experience.

The treatment consisted in putting into the cellular system, on the anterior lateral portion of the abdomen, by means of the ordinary hypodermic syringe, a slightly milky looking fluid contained in wine glasses holding two or three ounces each, carefully covered with thin pink-colored paper. The needle of the syringe was passed through the paper, which was evidently intended to prevent the free admission of air into the fluid. The quantity used was half a drachm for adults, less for children and ten to fifteen drops for infants. The operation was neatly performed, not by M. Pasteur but by an assistant, M. Pasteur standing near the door and calling out from a strip of paper the names of the patients. After

each injection the needle of the syringe was very properly dipped in a hot solution of some disinfectant, possibly a solution of salicylic acid, thus preventing the possibility of infecting other patients with—say syphilis. The patients were a motly crowd of Greeks, Jews and Gentiles, from Poland, Russia, Scandinavia, Italy, France, Germany, Austria, and perhaps the remotest end—adults, children and infants, mostly laboring peasant people, as these would naturally be most likely to receive mad-dog and mad-wolf bites. But not all were of this class, some of both the men and women were of the better class of gentry. Well, of course, while all this was interesting and easily seen, done and learned, it failed to satisfy. What was the fluid that contained this antihydrophobic microbe, and how is it prepared? These to the physician were the all important points, and these I believe, M. Pasteur has not revealed, *has kept a profound secret*. But, really, while this at first thought, would condemn M. Pasteur with the profession and, by a conduct so utterly at variance with all medical ethics, would consign him to the list of quacks and mountebanks, it may really result from the purest motives. It may be that M. Pasteur is afraid that the unskilled or careless attempts to prepare the fluid might bring the treatment into unmerited disrepute and that when he has perfected and established it, under his immediate care, it will be time to publish his process. Well, is his process a cure or preventive for rabies? I fear not; certainly, it has not been proved; has not been sufficiently tested, and like Perkins' Metallic Tractors may fail to stand a rigid test.

He has now treated 1050 patients, bitten by mad, or supposed mad-dogs and wolves, and only a few of these thus far died of rabies. Of the nineteen patients sent from Russia who had been bitten by a mad wolf, six or seven died here of hydrophobia and one or more since their return home. This frightful proportion, I learn, so frightened M. Pasteur that he insists that rabies in the wolf differs somewhat from the same disease in the dog. How does it differ?

Now, let us examine this wonderful discovery that has made M. Pasteur the most prominent professional man in the world, has, indeed, turned the eyes of all the world upon him, and by and through which he has received the highest honors, of stars and garters from the Czar of Russia and other kings and potentates, while the learned societies have been proud to do him honor. In the first place, perhaps not one dog in a dozen supposed to be mad, real-

ly has rabies. Dogs, like men, have fits, become insane, cranky. This condition in men may suggest pistols, daggers, etc., the so-called homicidal insanity; in a bull, it would manifest itself in a tendency to gore every person and animal that came in its way; in a ram, it would produce a butting furor; in the elephant, as is well known, it would result in the killing of its keeper; and, in the dog, as his habit in a sane condition is a killing one, would produce a morbid or exaggerated condition of this, his natural instinct, so that he would now be disposed to treat his friends as in a normal or healthy condition he would his foes. Thus rabies is a disorder especially belonging to brutes, dogs, cats, wolves, etc., and is transmitted to man with not less difficulty than is cholera transmitted to dogs, horses, cattle, etc. So much is this the case that perhaps not more than one person in three or five, who are bitten by animals really rabid, go mad. And many of these really do so by the profound mental disturbance in the individual, the morbid fright in having been bitten by a mad dog. Perhaps some of these last who go mad, and really die with many symptoms of hydrophobia have not rabies, and here comes in perhaps much of the efficacy of M. Pasteur's treatment, the patients are convinced that there is no possible danger, that they have been subjected to a treatment that knows no failure, that is specific, and if the same faith was given to Perkins' Metallic Tractors, perhaps the same might be obtained. If rabies is not a neurosis, surely many of its symptoms are certainly so, and ally it in some of its phenomena to chorea. In both conditions the neurotic phenomena may kill; in both the causes producing the symptoms may do so. Now the power and influence of hope and fear, mental impressions, in causing or curing many of these diseases, is well known. During the frightful epidemic of St. Vitus' dance that broke out in some of the monasteries and convents in Europe in the Middle Ages, many of the inmates of those institutions were seized immediately on seeing one affected with the disorder. Well, a wise doctor discovered that a *red hot iron* was a specific, not only in its application, but both preventing and curing the disease, by merely seeing it. He had the patients brought forward, placed a number of iron pokers in the fire and heated them to a red heat and ordered them applied to the first patient who had an attack. None were attacked. No one will infer by this that we do not believe that both rabies and chorea are real, any more than we would imply that cholera is not real

when we say that during a cholera epidemic many persons die with *fright cholera* who would not have been sick but for their fright.

Again, many persons who are bitten by dogs really mad, and who otherwise might go mad are protected by their clothing wiping off the morbid material as the dog's teeth pass through it, previous to entering the flesh, just as persons are sometimes protected by their clothing having wiped off the venom of snake-bites, who would certainly have perished had they been bitten on a naked part.

While then, with all other men, we heartily wish that this claimed discovery of M. Pasteur's may be real and efficient, in the absence of all knowledge of how it is prepared, with its imperfect test and with the known possibilities of error, we would prefer to wait further developments before giving our full assent unmixed with fear or doubt as to its efficacy.

M. Pasteur is about 65 years of age, some 5ft. 10in. in height, heavy set, with an iron constitution and extra inflexible will which images itself upon his visage, giving him almost a ferocious appearance, so that one could but feel when looking at him that he would have made a first class brigand, or an invincible commander of a privateer, where his victims would have been slaughtered without mercy; but, as his life has been devoted to benefitting not injuring, to saving not destroying man, as we might well divine, he has been as successful in the latter as he might have been in the former direction. Independent of his present field, he has perhaps done more good than any other living man and is fully entitled to all the honors that have been heaped upon him. His exalted worth as a scientist, together with our undivided faith in the unlimited power of science to prevent or cure every disorder of a zymotic nature to which human flesh is heir, encourages the hope, despite the objections given, that he is now moving in the right direction, and that his labors may result in the prevention of this heretofore incurable and horrible malady, and that even now he may be in possession of the means to lessen the danger resulting from the bite of rabid animals.

It is indeed difficult to believe that of the nineteen patients sent him from Russia, who had been not merely bitten by a mad-wolf, but torn to pieces, fearfully mangled by the enraged, mon-

strous, wild beast, only seven or eight should have died; indeed, at first sight, it would seem scarcely possible, torn as they were, (one of the patients having the trachea torn open) with the immense ulcerating surface exposed to the poison, that any of them should have escaped a horrible death; and yet it may be possible that as all these were bitten by the same animal in rapid succession, the first by wiping off with their clothes and flesh the saliva, may have protected those bitten later; just as we see if the most venomous snake is made to bite in rapid succession a number of rabbits or other small animals, only the first few die, the others being only slightly or not at all affected. If, however, it is true and he is really in possession of this miracle-working scientific discovery, it is impossible to overestimate its importance. Heretofore all hydrophobic patients have traveled the same road; from the dark, dismal labyrinths of rabies there have been no returning footsteps. Should then, this horrid disorder be exorcised by the almighty spell of science, the world's gratitude is due the wizard who works from science's alembic the wondrous spell.

NOTES ON THE SUCCESSFUL MANAGEMENT OF WRITER'S CRAMP AND ALLIED FORMS OF SPASMODIC PARALYSIS, BY INDUCED FRANKLINIC ELECTRO-MASSAGE.—By C. H. HUGHES, M. D., of St. Louis, Mo.

Until a comparatively recent date only indifferent success has attended or followed the various therapeutic procedures for the relief and cure of this intractable affection of the nervous system controlling the voluntary muscles concerned in the skilled habitual movements of professional manual dexterity. Book-keepers, pianists, engravers and others suffering with this form of paralysis have generally sought complete relief in vain.

The chief remedy prescribed had been absolute rest of the overworked groups of muscles and, internally the use of tonics, conjoined with central and peripheral galvanism and centripetal

faradization, until Beard taught that inaction was not a necessity to relief. The inadequate success attendant upon this plan, though Beard in his life-time claimed much from electricity alone in these forms, led Charcot and the German neurologists to recommend manual massage; and a certain masseur became well known to European neurologist savants for his skill in the cure of writers' cramp by his massage method.

The writer had long employed electricity, galvanic and faradic, general and local, in the treatment of this disease and the success of Schott's massage measures induced him to imitate them with the far preferable and more readily applied induced static muscular gymnastics.

With this agent, carefully adjusted to the needs of the affected muscles, this formidable incoördination neurosis of the skilled muscle movements peculiar to artisans, pianists and penmen, and the conjoint use of the constant current constitutionally applied, with such general remedies as may be indicated, can be cured and the physician need no longer be disappointed in its management.

Beginning in writer's cramp with a constant galvanic current from the motor area in the head to the terminal expansions of the digital branches of the median ulnar and radial nerves, and concluding the séance with a faradic massage by which the individual and combined movements of the affected fingers and thumb are reproduced by the contracting current. The faradic contractility was extended also to every possible movement of the forearm with the view to promote general muscular powers and nutrition.

While we had thus, after long and tedious treatment, conjoined with general tonic and neurotic conservative, internal therapy, and a judiciously enjoined cerebral hygiene, succeeded fairly well with our cases, the substitution of the induced static interrupted current for muscular gymnastics has made results far more certain and satisfactory,—so certain and satisfactory, in fact, as to induce us to conclude that the majority of these cases are peripheral, contrary to our former opinion.

Under this treatment the quickest cure we have to note is that of a prominent railway official, who recovered so as to again sign the papers of his office after five days daily treatment, and a telegraph operator, who, resuming his instrument after three days, considered himself perfectly well in one month thereafter.

The average treatment is six weeks, when given every second day.

I believe all cases of this not long ago unmanageable and whether of central origin or not, a necessary part of a grave cerebral disease, can be perfectly cured in this manner, and by this form of electro massage.

P. S.—Any physician who may choose to call at 3000 Chestnut, may see specimens of the hand writing of the cases here noted above, before they recovered their power of writing in a coordinate manner.

Correspondence

"IMMUNITY BY NATURAL SELECTION."

EDITORS OF THE ST. LOUIS MEDICAL AND SURGICAL JOURNAL:

I have been interested in an article in this month's issue of your JOURNAL, having the somewhat strongly Darwinian flavor evidenced by the phrase at the head of this communication.

The learned professor therein fitly sets forth a truth to be constantly borne in mind by our profession: That there is, and must ever exist, an unknown factor, of greater or less value, whose agency in medical and surgical successes or failures the medical profession will never be able to justly and exactly estimate. This the merest tyro in the healing art soon recognizes; but seems liable to lose sight of, unless reminded thereof.

But is not this "Immunity by Natural Selection" begging the question for which the professor's opponent contends? "Immunity by Natural Selection"—where do we find it? Who select it? Has not the writer made use of a Darwinianism; and by the selection of a similar phrase for a *dissimilar thing* rather confused ideas? It seems so.

The writer instances the protection afforded by vaccination against small-pox; but the statistics of this disease conclusively show that there is no such immunity, by natural or any other selection, unless the preventive measures of early childhood are

continued in adult life. The vital statistics of small-pox show, that while the percentage of children who die from this disease is much smaller than before vaccination became general, the percentage of adults who die from small-pox is greater than before the era of general vaccination. It is stated in the authorities making these statements, that the reason for the increased percentage of adult death from small-pox is because these persons neglect re-vaccination.

If these be real facts, then the "Immunity by Natural Selection" doctrine falls to the ground and is a mere theory, leaving one as much in the dark as before.

The fact that "six-sevenths of the people at large" do not have consumption does not prove that they have "acquired" that "Immunity by Natural Selection," for it may be that the germ-poison has not approached them; and if they have never been attacked, there was no need of defense of their persons against the noxious germs. The learned professor is clearly in error, in assuming that such an attack and repulse took place in the quoted "six-sevenths."

Of course, the word immunity might signify mere freedom from attack; but the context shows that such was not the writer's idea—as evidenced by the illustrations—vaccination, small-pox, hereditary transmission, etc. This latter would imply that a child might and should have immunity from small-pox if its father or mother was vaccinated or had suffered from the small-pox. Of course, the writer would not affirm this, and yet it is a legitimate deduction from his premises.

A few years ago, the health officer of a large eastern city (I think it was Philadelphia) labored hard in vaccinating the people under his care, during a small-pox epidemic. When the disease had almost died out, he took it and died. During the height of the disease, he seemed to bear a charmed life; yet he finally succumbed. Why? Tired out? General depreciation of system rendered him more liable? Some persons have the same disease two or more times, it is said. Of such it would be naturally and truly said that they had no immunity. Of course not; and in the very nature of such cases as are not attacked by these diseases, we can only say that they have *escaped attack*. In this sense, the word immunity might naturally and fitly apply. Any other sense is forced and belongs to the realm of speculation, theory; not scientific knowledge.

From the meagreness of the data at hand, for conclusions upon this interesting topic of immunity from disease, we are much in the dark; and the nature of the subject is so indefinite that it appears to me that dogmatism is clearly forbidden therein. May we not assume that when the general health-forces are at par, the system will successfully resist the attacks of disease or support extra demands upon its strength? This seems a reasonable conclusion, warranted by what facts have been observed.

G. F. G. Morgan

San Francisco, Cal.

Oct. 25, 1886.

When thieves fall out, etc.—This old adage never had a better illustration than was given in the "personal sundries" column of a local evening paper during the past month. A party who had been mixed up in a number of similar pieces of business, recently announced himself in this column as the "greatest of living astrologers and fortune tellers," and to emphasize his claim to the titles, gave a side-wipe at the women and men who had hitherto monopolized the business, by saying that he relied solely upon the stars and cards, and his skill in interpreting them, for *his* knowledge of the past, present and future, and those who visited *him* would not have any of the old gags used by the aforesaid rivals, worked off on them. The rivals immediately made common cause against the interloper, who by the way, dubs himself "doctor," and for several days the columns of the evening paper alluded to, were full of cards, challenges and announcements. Thousands of dollars were wagered (on paper) by each side and a vast deal of matter which furnished food for reflection found its way into print. The whole thing is a commentary upon the ignorance and superstition which prevails in our midst to an extent of which but few persons of the educated classes have any idea. Every one of these people are frauds and make their living by fraud and worse, and if the authorities would but do their duty, every one of them would serve a time in the penitentiary or on the rock-pile.

[Dec.,

Editorial Department.

FRANK L. JAMES, PH. D., M. D. and A. H. OHMANN-DUMESNIL,
A. M., M. D., Editors.

FRANK M. RUMBOLD, M. D., Business Manager.

Terms, \$2.00 per annum, in advance. Foreign Countries within
the Postal Union \$2.25.

TO OUR EXCHANGES.

We would most respectfully and earnestly request that when our cotemporaries find it necessary to refer to this JOURNAL they would do so by its full name, viz; THE SAINT LOUIS MEDICAL AND SURGICAL JOURNAL; or, if an abbreviation be used, that each word in the name be represented. This request is rendered necessary by the fact that there is a publication called the *St. Louis Medical Journal*, whose credits we are in no wise anxious to usurp, and to which we are, in like manner, unwilling to surrender that which justly belongs to us. It would likewise facilitate matters would our exchanges address journals intended for us to Exchange Box No. 62. Letters to us should be addressed to Lock Box 626.

THE NEW SURGEON GENERAL.

After waiting for several months the President has nominated Dr. John Moore to be Surgeon General of the Army. Dr. Moore

has been long stationed at San Francisco, and it appears has neither directly nor indirectly sought the honor thus conferred upon him. It is understood that he will take charge immediately, as there seems to be no doubt that the nomination will be confirmed by the Senate.

Since the retirement of Surgeon General Murray the position has been filled, and most acceptably so, by Dr. Baxter, of whom we have had occasion to speak in most complimentary terms more than once. Up to a very recent period, it was considered as an almost foregone conclusion that Dr. Baxter would receive the appointment, for which he was in every way qualified, not only by education and talent, but by long years of service, which placed him next to the office in the direct line of promotion.

While our great respect for the President and confidence in his absolute justice and fairness will not allow us to doubt that he had the best reasons for his action in the matter, we cannot but regret that he did not see proper to confer the place upon Dr. Baxter.

The new incumbent is said by all who have the pleasure of a personal acquaintance with him to be a man thoroughly fit and competent to fill the position, which is one requiring the very highest qualifications of education and experience. The medical department of our army is, of all others, that commanding the highest honor and respect among the scientists of the world. The scientific work done in its various bureaux and divisions is equal to any, and the publications made by the Department have never been equalled by those of any nation of modern times. From the past record of the new incumbent we cannot doubt that the office will be managed with the same skill, and kept to the high standard of his predecessors.

MEDICAL ADVERTISING.

Our enterprising confrères of New York and Philadelphia have struck upon another method of advertising themselves without contravening the letter of the code. For a long time it was the habit of some of them—and some whose names are high enough upon the roll of successful practitioners to make all such efforts at notoriety doubly infamous—to have a reporter of the daily

press conveniently smuggled into operating rooms along with medical students. Of course, the surgeons were ignorant of the identity of this individual, and were virtuously indignant at his reports. Their indignation was never so great, however, as to make them take any precautions against a repetition of the offense. The latest style of advertising among these metropolitan magnates is a step far in advance of the former, inasmuch as it gives them a national, instead of a local, notoriety. Instead of the reporters of the daily city newspapers, the telegraphic correspondents are utilized, and operations formerly described in the city press alone, are now sent broadcast through the country by multiple telegraph. Scarcely an issue of our local journals fails to have from half a column to a column of "wonderful surgical operations" sent out from New York or Philadelphia by special telegraphic correspondents. In these reports the names and titles of the operating surgeons are never forgotten, the anatomical and surgical terms are correct, and in fact, the whole article bears evidence of careful revision by competent hands. Whose? Reasoning from analogy we should answer, "by the hands of those most interested in and benefitted by the publications in question."

It is about time that some action were taken by competent medical authority, local or national, to put a stop to this most offensive form of advertising—offensive from any point of view that we may take. The operations described are usually such as any competent surgeon could perform. Indeed, several of those recently sent broadcast through the country by telegraph, magnifying the skill of some New York or Philadelphia surgeon, are such as are constantly performed by our local surgeons with scarcely a thought of their magnitude. If these men *will* advertise themselves thus, they should at least be placed outside the pale of regular medical journalism, and their names dropped from society reports, which now bristle with them.

WRITING FOR THE MEDICAL JOURNALS.

No one will deny that it is the duty of every practitioner who notes new and valuable facts, or who meets with strange and hitherto undescribed phenomena in any of the branches of medi-

cal science, to make them known to the balance of the profession through the medium of some reputable medical journal. But it is not the new and strange things only, which should be reported to the medical journals. There is scarcely an intelligent practitioner in the land who does not, occasionally at least, have cases which, while exhibiting no features which are either new or strange, are nevertheless interesting and instructive, and should be reported for these reasons alone. The idiosyncracies of patients as regards the action of drugs, the relative merits of methods of medication, etc., furnish an inexhaustible fund of valuable information which should be preserved through the medium of the medical press.

And yet, when we take up the journals of the country and go through them, one by one, how small, comparatively, is the list of writers! We venture to say that such a list would not represent one-tenth of the number of them who could and should contribute matter valuable to the profession at large. We find the same names appearing constantly, in all of the journals, as the workers and writers who furnish the reading matter of the medical world. And this is true, not merely of American, but, to a less extent, of foreign journals as well.

Wishing to stir up the profession on this point, we recently wrote a number of letters to physicians whom we know personally to be capable of furnishing valuable matter for publication, but whose names rarely or never appear in the journals, and some of their replies are before us. Some of them remind us that they "have so little time to write;" others say that "they are not accustomed to writing for publication" and hence "find it difficult to write anything that is fit to publish;" and a few excuse themselves on the ground that they never see anything worth writing about. Only one has the candor and courage to admit that he does not write "simply because he was born tired and has never yet become sufficiently rested."

These excuses are born of indolence and modesty, the former predominating. The plea of "no time" is the poorest of all, since if we examine the list of men who furnish the greater portion of our medical literature, we will find them to be, almost without exception, men of the largest and most exacting practice, men whose ante-rooms are crowded with patients during their office hours, and who, beside this, have large visiting lists, hospital and college clinics, lecture hours and social duties to fulfill.

Ask these men how they find leisure to attend society meetings, social events, conduct experiments and write for the journals, and they will tell you that it is by systematically economizing their hours and utilizing the odd minutes between. They turn from one occupation to another, and from the change find rest and even amusement.

To those whom modesty withholds from writing, we would say "you underrate yourselves. The difficulty that you find in putting your ideas into shape is the result of lack of practice and effort, and not of ability. Facility of expression comes naturally to but few men. In the great majority of instances it is gained by practice only. Acquire the habit of jotting down your thoughts and keeping an outline record of your cases as they occur, and you will soon be able to write them up *currente calamo*."

Traps for the Unwary.—We learn that a party who claims to have a "sure cure for diphtheria" and is desirous of having a chance to try his medicine upon the public, has approached several young and struggling practitioners with offers of employment under him. Being in wholesome dread of the Board of Health, he naturally wants somebody properly qualified to sign death certificates to go in with him. Up to writing he had not secured the coveted shield. The young physician should remember that it takes but one false step to blight a lifetime, and should shun all such short cuts to fortune as he would shun the leprosy or the plague.

Who made the search?—In a recent murder trial in Illinois, where a man and woman were accused of having poisoned the husband of the latter, it was stated in court that "the intestines of the deceased had been sent to Saint Louis for analysis, but that nobody capable of making the analysis could be found in that city" and consequently they had been sent thence to Chicago. There are in Saint Louis at least a dozen men, any one of whom is the equal of any chemist in Chicago, and who could have made the examination required, had they been applied to in the proper manner.

1886.]

Department of Microscopy.

CONDUCTED BY

FRANK L. JAMES, Ph. D., M. D., President of the St. Louis Society
of Microscopists, of St. Louis, Mo.

An Oversight Corrected.—By some strange oversight, neither this journal nor the two other micrographical publications represented at Chautauqua, made any mention in our reports of what was confessedly one of the most valuable and instructive of all the sessions held on that occasion, viz: the evening spent by Governor J. D. Cox and Mr. W. H. Walmsley in illustrating their methods of photomicrography. Mr. E. H. Griffith, with his usual thoughtfulness of the rights and feelings of others, calls attention to this strange omission in the last number of the *Microscope*. As for myself, I cannot understand how I should have omitted a matter of so much interest and value. It was certainly from no intentional negligence, since no one can have a higher opinion of the skill of, or a kindlier feeling personally for the gentlemen named.

Microscopical Technology.—Owing to the pressure on our space made by the publication of our semi-annual index, and by the paper of Dr. Reeves on Section Cutting, we have been compelled, this month, to omit our usual paper on Microscopical Technology. Part I of this series will be brought to a close in the January JOURNAL, and we shall then take up special technology, which will include papers on the microscopical examination of urine and urinary deposits, blood, pus and other pathological fluids (vomit, feces, sputum, fluids from cysts etc.), injecting, the outline of the bacterial investigation, etc. In fact, our aim will be to give in a plain and practical form the processes and manipu-

lations requisite to enable any physician possessed of a microscope and ordinary mechanical aptitude to make all the examinations usually required in private or hospital practice.

Cole's Studies in Microscopy.—There are a great many physicians who appreciate most fully the usefulness of the microscope in medicine and the immense advantages offered to the general practitioner by a knowledge of the instrument, but who are deterred from attempting to make use of it by the lack of the training and practice necessary to the proper interpretation of its revelations. While nothing can fully take the place of experience, observation and original research in this direction, much may be done to facilitate the acquisition of a knowledge sufficient for most practical purposes, by having at hand a series of reliable preparations which may be used as standards of comparison in doubtful cases. Such a series are the "studies in microscopical science" now being issued by Mr. Arthur Cole, of London, England. Each of these studies consists of a prepared slide and a fasciculum of letter press, the latter consisting of a well executed engraving, photo-micrograph, or heliotype, together with a minute description of the microscopical appearances characteristic of the object. They are divided into four groups, viz; pathological, histological (animal and vegetable) and mixed; each group being separate and distinct. In the pathological series the author takes up an organ and gives a slide illustrative of each diseased condition therefore capable of being so illustrated. The series of the pathology of lung diseases, for instance, is illustrated by sections of lung in alveolar pneumonia, 1st, 2nd, and 3rd stages, in bronchial pneumonia, interstitial pneumonia, tuberculosis, tubercle softening in centre, brown induration, vesicular emphysema, acute pleurisy, anthracosis and carcinoma. The kidney is taken up in the same thorough manner. The subscription price of each series of 12 slides is \$6.00, or \$20.00 for the full set. The American agents are J. W. Queen & Co., of Philadelphia.

THE JOURNALS FOR OCTOBER AND NOVEMBER.

The *Scientific Enquirer* for November has a continuation of Mr. Goodale's "Studies of plant life in general" (being num-

ber IV of *The Study of a few Common Plants*) and an article on *Insectivorous Plants* by Minnie McKean. The most interesting and valuable feature of this publication is its department of Questions and Answers. Persons in search of information on any scientific subject, address their question to the editor, it is published and answers are thus elicited from experts in that particular line of scientific inquiry. The Enquirer is the monthly supplement to the *Quarterly Journal of Microscopy and Natural Science*.

The *Microscope* for November has a continuation of Professor Burril's paper on Bacteria and Disease (printed in the September number of this journal). Allen Y. Moore has a description of a "Central-light Objective" made by Herbert Spencer for our friend Dr. Charles Mitchell, Secretary of the Nashville Board of Health. Dr. Moore, who is certainly one of the most competent of living authorities on this subject, says of this objective (a one eighteenth, 105° B. A.) that its resolving power is better than that of any lens he ever saw. Eugene Pinckney describes a new slide-box of ingenious construction. The editorial on the "Microscope and its Future" is a well written glance into the future uses of the instrument. The usual notes on current subjects close the number.

Le Journal de Micrographie.—The September and October numbers of this great French journal are unusually rich in matters of interest to physicians who use the microscope. Dr. Leon Marchand concludes his exhaustive study of Microbes, his summary of the subject being particularly interesting. His conclusions in the main justify the opinion expressed by the writer some time ago in these pages, viz: that while extremely interesting from a biological standpoint, the microbial investigation has thus far conducted very little to the advancement of medical science. Perhaps, indeed very likely, this advancement will come afterwards, when continued investigation shall have cleared away the mass of errors and contradictions which now constitute the literature of the subject. Another most valuable paper is the continuation of Prof. Giaccio's study of the fine structure of the eyes of diptera, which is a work in comparative ophthalmology of the greatest importance. M. Renooz continues his *New Theory of Evolution*, the present chapter being on the vascular ariole (embrional), and the proto and caudal vertebræ. Perhaps the most valuable of the contributions is one from M. Albert Robin on a "New Theory of

Albuminuria." The first chapter sets forth the facts upon which the theory (the influence of hæmatose in albuminuria) is built. A translation of this article will be made when it is completed.

The Royal Journal.—This superb bimonthly is always so full of valuable matter that one scarcely ever knows where to commence to select articles for notice. Of the papers directly interesting physicians, we note one by E. Jung, on "The Influence of the Variation of the Physio-Chemical Medium on the Development of Animals." In Physiology there are abstracts of a paper by Will (Oogenetic Studies), Romanes (Physiological Selection) and others, all of deep interest to the student. Every physician who works with the microscope should have the Journal of the Royal Microscopical Society.

Not come to hand.—*The Quarterly Journal of Microscopy and Science* (Bath, England) for October, and the *American Monthly Microscopical Journal*, for November.

SECTION CUTTING—REEVES' METHOD.

We have several times alluded to the wonderfully thin, even, and beautiful sections of pathological and histological material made by Dr. James E. Reeves, of Wheeling, W. Va., and exhibited by him at the Chautauqua meeting of the American Society of Microscopists. In the exhibit there made Dr. Reeves showed sections of almost every portion of the tissues and structures of the animal economy, and there seemed to be absolutely no difference in the quality of the work. Lung tissue was placed along side of sections of denser structure and the sections in some instances were so thin and uniform that it was difficult to believe that they were not photographed upon the slide.

The physician who habitually uses the microscope need not be told what a wonderful step in advance is here made in the study of histology and pathology. We therefore make no apology for the space yielded to the following paper from Dr. Reeves. It is an abstract containing all the essential points of an essay on the subject prepared by the doctor for the Bausch & Lomb Optical Co., of Rochester, N. Y., with whose microtome alone Dr. Reeves has been able to secure the results noted. We are indebted to the courtesy of the house for advance sheets of the essay and the permission to use it.

PREPARING THE TISSUES FOR CUTTING ; HARDENING.—After enumerating the apparatus and accessories necessary in successful sectioning (which were described in the chapter on this subject in *Microscopical Technology*) the author introduces his subject by a few words on hardening the material. Of all the hardening agents he gives the preference to alcohol, used, not gradually, as recommended by most authorities (see *Micros. Tech.*, § X), but absolute.

The fresh specimen should, first of all, be thoroughly washed in ice-cold water, and kept at nearly freezing temperature for an hour or two, and then transferred to at least *twenty volumes* of absolute alcohol. By this method small pieces of tissue, say a half inch square and a quarter of an inch thick, may be thoroughly hardened and made ready for embedding within twenty-four hours. But when there is no need of such hurry, it is safer to occupy several days in the process of hardening.

A common mistake is made in not cutting the specimen into small enough pieces, and by disregarding the necessity of at least *twenty volumes* of alcohol. As soon as the alcohol becomes cloudy it should be changed, again and again, until all cloudiness disappears.

CLEARING AND EMBEDDING.—When sufficiently hardened and dehydrated, the specimen should be immersed in spirits of turpentine or benzol, and there remain from a half hour to twelve hours, or longer, according to density of tissue, or until it is thoroughly permeated and *cleared*. When this is accomplished the specimen is transferred to a bath of melted paraffin. For this bath the Bausch & Lomb Company have devised a very useful, indeed, almost indispensable oven, which keeps the paraffin at any desired temperature. The specimen is kept in this bath, at a temperature of not above 140° F., from a quarter of an hour to eight or ten hours, according to the density of the tissue. The time necessary may be judged by the disengagement of air from the specimen. When the bubbles cease to rise the material is ready for further progress. This process of soaking in paraffin is known as *interstitial embedding*, in contradistinction to simple embedding (pouring melted paraffin or other material around the object. See *Micros. Tech.*, § XX).

MAKING THE CAST.—After the interstitial embedding the specimen is ready to be cast. This process is done as follows: Take

a piece of writing paper (a physician's prescription blank will exactly answer the purpose), place it on the work-table, on the lid of a rack-box, on the lid of a book, or on anything having a plane, smooth surface; pour upon the paper enough melted paraffin to cover the size of a quarter of a dollar; instantly, the paraffin thus spread upon the paper begins to cool and thicken; then, by means of the lifter accompanying the water-bath and oven, pick up from the bottom of the cup containing the melted paraffin the thoroughly soaked specimen and quickly fix it in the center of the paraffin film on the paper, with the side to be cut downward; gently press upon the specimen with the finger, to fix it securely from turning or getting out of place; then over the specimen set a mould, and sink its lower end into the soft paraffin coating on the paper; then pour into the mould melted paraffin until it is full to running over.

REMOVAL FROM THE MOULD.—As soon as the cast becomes cold it may be pushed out of the mould by placing the thumb upon the *upper* or contracted end and using a little force. If the cast stick to the mould, revolve it over the flame of a spirit lamp and it will then easily slip out. If the work has been properly done in all of its steps, the cast thus withdrawn will be perfectly homogeneous, and the cast throughout will be as clear as if it had been cut from a block of pure paraffin. If when drawn it present a cloudy appearance, like "snow-ice," and especially should the specimen, on pressing it with the finger seem boggy or elastic, with its edges shrunken and parting from the paraffin, it is utterly worthless and should be thrown back into the cup of paraffin to be melted over, soaked longer and recast.

PREPARING FOR THE HOLDER.—When the cast becomes cold enough to handle safely, and has been found a good one, the end from which it was poured into the mould may be cut off, and the two opposite sides showing the greatest thickness of paraffin shaved down and flattened, thus shaping it for stronger hold in the jaws of the microtome carriage. Except on that side of the cast at which the knife first commences to cut, where a wall of paraffin about the one-sixteenth of an inch thick should be left so that the edge of the section may be securely caught between the edge of the knife and the section flattener, the paraffin should be trimmed away almost to the line of the embedded specimen.

[The "section flattener" here alluded to is a simple device of wire attachable to the back of the knife. It prevents the curling of sections. F. L. J.]

The cast is now ready for the microtome.

The method of using the microtome is next described by Dr. Reeves, but as this portion of his article is simply an epitome of the printed directions which go with each instrument, it is not necessary to reproduce it here.

PREPARATION OF SLIP.—A clean glass slip is coated in the center over a space somewhat larger than the section to be mounted with a mixture of collodion and oil of cloves (1 part of the former to 20 parts of the latter) and the section is taken, with a pair of delicate forceps directly from the microtome knife and laid upon the coated part. The slip is placed in the heating apparatus and kept at a temperature of not over 130° Fahr., for five or ten minutes, or long enough to melt the paraffin. It is then removed and placed in a beaker of oil of turpentine and left until it clears. This removes the embedding material etc. and prepares the object for staining.

STAINING.—From the oil of turpentine the slip is removed into a beaker of alcohol of 95° and there kept until the turpentine is washed out. The stain may now be applied. The process of staining is the usual one and does not need to be described here. The stain is fixed in the usual way (with acid alcohol or other 'fixers') and the slide is then transferred to distilled water. The subsequent processes are the same as have been already described in *Microscopical Technology* for the preparation of sections for mounting in balsam, the only difference being that the section is already fixed upon the slip, and the whole thing is transferred from one fluid to another, thus, from water to commercial alcohol, thence to absolute alcohol, and thence to benzol.

FOR A MOUNTING MEDIUM, Dr. Reeves uses balsam cut with collodion, just enough of the latter being used to make the balsam flow easily. The application of the cover glass finishes the operation.

REMARKS.—The process of interstitial embedding, as described above, may be applied to material to be cut in the hand microtome. The section flattener is made in sizes that enable it to be applied to the ordinary section knife. One possessed of a little ingenuity can make a contrivance from a knitting needle that will answer every purpose. The Bausch & Lomb Optical Co. will have

Dr. Reeves' pamphlets ready for distribution in a short time and those desirous of following his methods are referred to them for fuller minutiae in regard to formulæ, etc. The process as described on paper seems tedious and exacting, but in practice it is not more so than mounting in any other manner. The results are so incomparably superior to any others that we have ever seen, that the extra care and labor are abundantly repaid.

Department of Dermatology and Syphilology

CONDUCTED BY

A. H. OHMANN-DUMESNIL, A. M., M. D., of St. Louis.

Etiology of Scleroderma.—Dr. J. E. Graham, in a contribution to the clinical study of scleroderma, published in the *Journal of Cutaneous and Venereal Diseases*, states it as his belief that it is quite improbable that such a general condition as scleroderma can be a purely local disease. He thinks that there exist doubtless, pathological conditions in the deeper organs which have so far escaped observation. The two classes of diseases which suggest themselves as possible causes or as being most likely to be more or less connected with this disease, are the tropho-neuroses and various forms of rheumatism. Whilst the generally accepted opinion seems to be that scleroderma is a tropho-neurosis and that the true cause exists in the trophic nerve centres, a great difference exists between it and some trophic diseases, such as pseudo-hypertrophy, muscular paralysis, etc. In these diseases the lesion, in most of the cases, is either permanent or progressive in character, whereas in scleroderma recovery takes place sooner or later in many cases.

The author's opinion is that the disease is more nearly allied to the rheumatic affections, but does not mean to deny that there is also a close relation with the tropho-neuroses, more especially as

the close relationships existing between rheumatic joint affections and trophic nerve troubles have been so clearly pointed out.

Epidemic of Whitlow by Contact.—Dr. Audry reports in the *Lyon Médical* an epidemic of whitlow, which he regards as the result of contact. It occurred in a school, the first case being in a girl, aged 9 1-2, who did not know the origin of her trouble. The other cases observed were members of her class in the school, and the schoolmistress. In this connection, it may be proper to state that the affection was of the superficial variety, limited to the skin, and not exclusively ungual. It was what is known in common parlance as “run-around” (*tournoiement*). The seat of the trouble was always the right hand, and although the majority had the disease but on one finger, several had two or more fingers involved. The epidemic subsided about three months after its appearance in the first patient. The affected children were isolated as far as possible from the others. Taking all the facts into consideration, Dr. Audry regards this as a true epidemic, and he seems to have good grounds for his opinion. On this account the fact is one worthy of record in order to draw the attention of physicians having in charge schools and public institutions. It is a well-known fact that ringworm in schools is a very difficult thing to treat, and this variety of whitlow may become equally so, unless prompt measures are taken to isolate the individuals who are the centres of infection.

Pruritus from Carbolic Acid.—Dr. C. Leonard Whitmire records an interesting case in the *Peoria Medical Monthly*. It appears that a young married man, of 25, accidentally spilled some carbolic acid over his shoulders and back. He did not wash it off, and in consequence his shirt became thoroughly saturated with it and an extensive sore was produced. He rubbed goose-grease over the part and thought no more of it. Eight or ten days after the accident, he began to experience strange pricking sensations in the neighborhood of the wound. The severity of the symptoms increased and spread rapidly over the whole surface. This pain became so intense that he kept continually scratching and finally he could not rest and kept running up and down his fields for eighty-six consecutive hours. He was wild with pain and mental distress. All remedies, both internal and external, seemed to have no effect whatever. Bleeding seemed

to allay the itching, but as soon as the blood ceased flowing all the pain and itching returned. He was finally quieted by hypodermics of morphine every twelve hours until six doses had been given. After this the itching returned, in a moderate degree, and was alleviated considerably by local agents. This continued about four months and finally subsided.

Is Alopecia Prematura Contagious?—At a late meeting of the Chicago Medical Society, Dr. R. W. Bishop read a paper with the above title and stated that he had made a series of experiments which seemed to answer the question in the affirmative. The hair from a typical case was found brittle and came out easily when pulled. Microscopic examination showed that there existed quite a large number of fungous bodies on the scalp, and the shafts of the hair were invaded, the roots being free. Some of the diseased hairs were taken out and mixed with vaselin. This was rubbed on the skin of healthy rabbits and, in about fifteen days, the hair had disappeared from those parts which had been rubbed. The patient was cured by a treatment which consisted essentially of anti-parasitics and stimulants. Despite the experiments of Dr. Bishop, the question of the contagiousness of alopecia prematura is an open one. It has been demonstrated that inunctions made with rancid oil and vaselin in Guinea pigs also produce baldness, as was pointed out in the discussion of the paper, by Dr. Zeisler. Certain diets will also have the same effect.

The Iodoform Rash.—But very few cases of this rare and interesting exanthem are upon record and, considering the extensive use of iodoform as a surgical dressing, it seems rather singular. Frederick Treves, in an interesting article on the subject in the *Practitioner*, states from his own experience and as the result of a search into the literature of the subject, he has found that two distinct eruptions exist. One is purely local and due to the action of the iodoform on the skin. It consists of a number of small vesicles which suppurate and are followed by crusts. In fact, it is a form of dermatitis. In the other form we have an expression of the constitutional effects of the iodoform. The eruption appears in the form of patches disseminated over comparatively extensive areas. These patches consist each of a number of closely packed papules. The papules are each smaller than a pin's head, and set upon a pink erythematous base. The

papules are easily felt as well as seen and are somewhat paler than the surrounding skin. The patches vary in size from a dime to a silver quarter. The margins are clearly defined. In a few days the eruption disappears and gives way to a yellowish discoloration of the skin. It may be well to state that a very small amount of iodóform may provoke the rash.

Gastric Syphilis and Simple Ulcer of the Stomach.—

Dr. L. Galliard some time ago published a paper in the *Archives de Médecine*, whose conclusions are worthy of reproduction. He says that gastric syphilis does exist. In proof of this we have a number of important clinical facts, anatomical facts that might be called into question and also unquestionable anatomical facts, such as two ulcerated gummata of the stomach. Syphilis of the stomach is perhaps less rare than has been generally believed up to the present, leaving aside amyloid degeneration. By a close study of certain so-called simple ulcers in syphilitics either during their ulcerative process or after cicatrization, Dr. Galliard believes that we may be able to establish the pathogenetic rôle of syphilis in their production or be able to describe more precisely the characteristics of the ulcerative syphilides of the stomach. The practical results of such observations would be the useful application of specific treatment in this variety of gastric disorders.

Syphilitic Hemiplegia.—At a meeting of the New York Academy of Medicine, Dr. Julius Althaus read a paper on Some Phases of Cerebral Syphilis. In this paper he referred to several types of syphilitic hemiplegia.

In the first type mentioned, the accident is rather paresis than paralysis, and there seem to be no other subjective symptoms than a feeling of giddiness and a sensation of the paralysis gradually stealing over the side. In the second variety we have one in which the paralysis is preceded by headache of a peculiar character. In the third type of syphilitic hemiplegia we have one in which both sides of the body are affected in succession, the attacks following one another either within a few days, or weeks, or months. The last type to which attention was drawn, differs from the others in the fact that the paralysis comes on not more or less suddenly, but quite slowly. The treatment of these nerve and brain lesions is not always satisfactory as might be supposed, because whilst specific treatment causes a rapid disappearance of

the exciting cause, the secondary damages which have been produced are often irreparable.

SHORT TALKS ON DERMATOLOGY.

Under the above Caption the Editor of this Department proposes, in each number of the JOURNAL, to give a short practical synopsis of the principal points attaching to the diagnosis and treatment of some skin disease. No attempt will be made to follow any classification, but diseases will be taken up as they suggest themselves.

XIV. XANTHOMA.

This affection, known also under the names of xanthelasma and vitiligoidea, is one which, whilst not common, is still occasionally encountered by the general practitioner. It derives its name from the yellow appearance it presents, and it may be briefly divided into two forms, the macular and the tubercular.

In the macular form we have presented spots of an ovalish or somewhat crescentic shape, and varying in size from a pin's head to the thumb-nail. These macules are of a yellow color, varying in degree from straw to sulphur yellow. They are soft and velvety to the touch, are apparently not raised above the surface of the skin and are inclined to be symmetrical in distribution. In appearance they may perhaps be best described as resembling a piece of chamois skin which has been let into the integument until level with it. The spots may be discrete, or several, in the immediate neighborhood of each other, may become confluent or coalesce. The site of predilection of this affection is the eyelids, towards the inner canthus and, in my experience, it is the lower eyelid which I have found most often affected. Besides this, the face may be involved in different parts. Other portions of the body are also subject to this affection. The mucous membrane of the mouth, the membrane of the trachea and internal organs, such as the spleen, have been observed to be the seat of the disease. In this form (xanthoma planum), the macular, there are no subjective symptoms whatever, and the patient would be entirely unconscious of the fact that it existed, did its color not present such a contrast to the normal skin.

The tubercular form (xanthoma tuberosum) is distinguished from the former by the existence of a number of small masses

varying in size from a hemp-seed to a cherry and having a pretty deep yellow color. They are soft, having about the same consistency as a fatty tumor. This variety is comparatively rare, and occurs more often upon the trunk and around joints. There is frequently a certain amount of pain connected with the tubercles and more especially when the joints are moved.

When both forms exist we have xanthoma multiplex, an exceedingly rare form of the disease.

The causes which produce xanthoma are not known. Whilst icterus and jaundice have been invoked as causes, the weight of evidence is not sufficient to establish the truth of this claim. Heredity is also attributed as a cause, but very few cases have been adduced in confirmation. Parenchymatous affections of the liver, as a cause of xanthoma, have many ardent advocates; but the best that can be said upon this point is that we are as yet ignorant of the causes of this affection of the skin.

Most authorities are agreed in calling it a neoplastic formation. Whilst some denominate it an irritative process, accompanied by a new formation of cells, others call it a connective tissue new growth, with fatty degeneration. The yellow color is probably due to fat, and possibly in part to the cholesterin crystals which are found therein.

The treatment is entirely restricted to removal of the part involved. This may be accomplished with the knife and when this means is used, more especially about the eyelids, care should be taken not to remove too much tissue, as it may result in ectropion. Good results have been reported as following the use of electrolysis. In general, cases of xanthoma planum are best let alone, as the cosmetic effects are not improved by operative interference, and that is the only possible reason that can suggest an operation. All local applications not of a caustic character, and all internal remedies are perfectly useless in xanthoma.

So far as the prognosis of the disease is concerned, it is bad. Whilst there are cases on record which have recovered spontaneously, but little hope can be held out in this respect. This disease is perhaps more of a deformity than anything else, and its growth is a very slow and gradual one. When it has once appeared it generally remains for life, and after a certain length of time it reaches its maximum state of development and remains in *statu quo*.

Department of Diseases of the Eye and Ear.

CONDUCTED BY

A. D. WILLIAMS, M. D., OF ST. LOUIS.

Head Lice a Cure for Pannus.—Some time ago, I saw a man who had a scum (pannus) covering the upper part of the cornea. A neighbor had told him that if he would put a few head lice (*pediculi capitis*) into the eye they would eat the scum off. He skirmished around until he captured a half dozen of the creatures, and actually put them in his eye. The treatment killed the lice but did not benefit the pannus. In fact, the latter was considerably aggravated, as it had a right to be.

Furuncles in the Ear.—From some unknown cause, when a person has a boil in the ear he is likely to have a succession of them. I have known persons, otherwise in good health, who eternally had a boil on hand, or on ear, rather, either coming or going, so that their lives were made miserable by the affliction. There is no sure preventive treatment, but I think the best is to split the boil freely, as soon as it can be located, clean the blood away and let the ear alone. Boils are often excited by picking or syringing and by putting medicines (particularly fluids) into the ear. A few weeks ago I opened the fourth or fifth furuncle in the ear of a lady, and told her to let the ear alone. As I have not seen her since then, I suppose she followed the advice and had surcease of furuncles.

Sudden and Total Deafness a Symptom of Cerebro-Spinal Meningitis.—I recently examined a child, two years old, which a year ago fell ill and became suddenly totally deaf, and has remained so ever since. Examination disclosed no visible cause for the condition. Both drums were in a normal condition and had evidently never been seriously injured or diseased. The conclusion therefore was that the cause of deafness was cerebral

—without doubt the result of spotted fever. And though the physician who attended the infant during the attack did not suspect cerebro-spinal meningitis, I learned, on close inquiry, that in the earlier part of its illness the body was bent, so that the child rested on the back of its head and its heels, and the mother said it required considerable force to straighten it. My experience has shown that whenever a person, young or old, during an illness becomes suddenly totally deaf, the attack is one of cerebro-spinal meningitis. There is no other disease which suddenly so gravely affects the audition. This it does by destroying the labyrinths (whenever it attacks them at all). Persons affected with some other grave diseases, may suddenly become hard of hearing or partially deaf, but rarely or never entirely so.

Transplantation of the Cornea of a Rabbit to the Human Eye.—In the Report of the Heidelberg Ophthalmological Society, for 1886, V. Hippel chronicles a successful transplantation of a portion of a rabbit's cornea to the eye of a young woman. In the patient's eye there was a dense central opacity, caused by a thick deposit of lead, which covered the pupil so that, at best, the fingers could barely be counted. This opacity was cut around by a trepan of proper size, down to the membrane of Descemet, from which it was carefully dissected away. Then with the same trepan, the central portion of a rabbit's cornea was cut out and slipped into the place from which the opacity had been removed, which it fitted snugly. The eye was dressed antiseptically and gently closed with compress and bandage, which was left off at the expiration of two weeks. The cornea healed kindly, and after eight months the vision was found to be one-tenth. This case can truthfully be called a success, since not only was an ugly blemish removed, but useful vision was secured. While it proves that the cornea may be successfully transplanted, the cases in which the operation should be resorted to are very rare.

The Galvano-Cautery in Sloughing Ulcers of the Cornea.—Sloughing ulcers of the cornea, usually accompanied with pus-formation in the anterior chamber—the so-called hypopion-keratitis, have heretofore been very difficult to manage. In fact, many of the cases under former methods of treatment have been inevitably lost. Hence, any improvement in the therapeutics of the disease is to be heartily welcomed.

The use of the actual cautery, quite recently introduced, is a great step forward. In a recent case of the kind, I resorted to it with a happy result. The ulceration was extending, the pain persistent and the pus in the anterior chamber constantly increasing. The eye seemed doomed. I first made use of a steel probe, holding it in the flame of a spirit lamp until it became as hot as it could thus be made, and with it I touched the ulcer as quickly and lightly as possible. The application was repeated two or three times. The result was that the ulceration was slightly checked only, and was soon as bad as ever. The slough separated slowly and was insufficient because the cautery was not hot enough. This is the great objection to the use of the probe for the purpose. It cannot be heated to a proper temperature in the ordinary alcohol lamp flame, and its mass is so small that it loses its heat before it can be applied.

I then used the galvano-cautery, and burned well into the point of the ulceration, which was deep down into the tissue of the cornea. There was scarcely any reaction, the pain ceased, the pus in the anterior chamber was absorbed and the ulcer healed kindly. The galvano-cautery saved the eye from complete destruction. The eye having been thoroughly cocaineized, the operation caused no pain.

A New Use for the Tongue.—For ages and ages the tongue was used entirely to talk with; if it had any other uses men didn't find them out. The consequence of this was that one-half of the race had a practical monopoly of the organ. Not that the male half didn't have tongues; but not having the practice, they failed to use them with the facility and volubility of the female half. The invention of the postage stamp evened things up somewhat, by introducing *licking*, an accomplishment at which men became almost as adept as women. Very recently I learned that the latter had found a new use for the organ which had hitherto been kept very quiet (the use, not the organ), and I 'got on to it' only by accident. A woman called to see me about one of her eyes in which, she maintained, there was something which would require great skill to get out. Before examining the eye I asked her why she thought it would require extra skill to relieve her. "Sure," was the answer "ould Mrs. McGran *tongued* for it an' failed!" "Tongued for it" said I, "what on earth do you mean?" And then she explained that Mrs. McGran *had*

stuck her tongue into the eye, swabbing it around under the lids in search of the foreign matter. "But she didn't get it, and sure its the first time ever she failed!" In mute astonishment I examined the eye and found that Mrs. McGran had failed for a very good reason,—there was keratitis, but no foreign substance there.

In all earnestness, however, I was informed that the habit of using the tongue for the removal of foreign substances in the eye is quite a common one. Indeed, it is resorted to to an extent that seems almost incredible. Within the past few weeks I have seen quite a number of persons on whom it had been practiced as a means of relieving the eye of dust, cinders, etc. It is thrust into the eye and made to move back and forth under the lids, the substance either sticking to the tip or being washed out by the tears excited by the action. It seems to me that it would require a good deal of nerve or affection, or both, to induce one to put the tongue into an inflamed eye, especially if it were suppurating freely.

Violent Blepharospasm, complicated with Spasms of the Muscles of the Mouth and Neck.—Several years since an old Italian fruit-vender called to see me and prefaced the interview with the request to "give him something that would cure him and not something that would *not* cure him."

I found violent blepharospasm of both eyes, but could not find the slightest cause to account for the condition. There was no trace of inflammatory trouble; both eyes were bright and clear and vision was good in both. Every few minutes both orbicular muscles would contract with such violence that the eyes would be firmly closed for 1 to 2 minutes, so that the patient could not possibly voluntarily open them. Immediately following the commencement of the spasms in the lids the mouth would be forcibly drawn open to the fullest extent, and the tongue would be protruded to its full length. Before this latter condition was completed the muscles of the neck, by spasmodic action, would draw the head downwards till the chin would rest upon the breast. Thus the patient would remain one or two minutes, when the spasms would give way, the head would go up, the tongue go back, the mouth close and the eyes would open. These spasmodic actions were repeated every fifteen or twenty minutes. The man's ignorance was so dense and his degree of intelligence was so low that I could not get him to comprehend the peculiarly difficult and obscure nature

of his trouble. His only answer would be: "I want something to cure me and nothing else."

I treated him in the usual way, with alteratives, tonics, and counterirritants, without any beneficial effects. He soon disappeared. I learned afterwards that he went into the hands of the quacks; one of whom treated him for "granulated lids" and actually inoculated his eyes with trachoma by using unclean brushes and instruments on him. I repeatedly saw him on the streets for years afterwards. When the spasms came upon him he would stop and stand perfectly still, till the muscles would relax so that he could get his eyes open.

The hideous appearance of the poor fellow when these spasms came upon him can readily be understood when it is remembered that his eyes were firmly closed, his mouth wide open, with the saliva streaming from it, his tongue protruded far out and his chin drawn firmly down upon his breast.

Two years ago, after he had gone the rounds of the quacks, he called to ask me to undertake his case again. The spasms were still present, the lids of both eyes were badly granulated, ulcers had developed in both and both were more or less covered with pannus, so that he could barely see to get about. On account of the impossibility of getting him to comprehend the serious nature of his trouble, I declined to treat him further.

I believe that he had some obscure lesion of the brain, which caused all the phenomena. Prognosis nearly hopeless.

The Archives of Gynæcology, Obstetrics and Pædiatrics, series of 1886, has met with such warm encouragement as a bi-monthly, that its publishers announce that they will issue the publication monthly after the first of January next. It is pleasant to note the change.

Hydrophobia.—Dairy Irick, a little Chicago girl was bitten by a pet dog a few weeks ago. On the ninth day after the bite, symptoms of rabies appeared. The disease rapidly developed and the child died on the 11th day after the injury.

Medical Progress.

THERAPEUTICS.

Iodoform in Meningitis.—M. Warfvinge publishes in the *Rev. Internat. des Sciences Médicales* an account of tubercular meningitis successfully treated by him with inunctions of iodoform pomade (iodoform 1 part, vaselin 5 parts). Three quarters of an ounce of this unguent were well rubbed in over the whole head twice daily, the head being covered at other times with a capote made of some impermeable stuff. Five successful cases are reported.

Veratrium in cholera-morbus.—During the past two summers cholera-morbus has been more than usually prevalent, and fatal in Germany and Italy. Of all the treatments proposed for it, none seems to have been so successful as that by veratrium. The powdered herb, the tincture, and the alkaloid (veratrine) have been alike efficient, though the last has the advantage of being equally useful when exhibited by the mouth or hypodermically. The dose should be the full medicinal one, repeated with the usual precautions.

A-New Collodion.—A new film-producing material which is said to possess many advantages over the time-honored solution of gun cotton in ether, is made, according to a writer in the *Union Pharmacale*, by mixing 3 parts of gum mastic, in powder, and 1 part of balsam of Peru, dry, and dissolving the whole in 5 parts of chloroform. When an analgesic effect is desired one part of narcotine may be added to the gums and dissolved with them in the chloroform. Silk or linen cloths may be soaked in the mixture and dried and afterward used as court-plaster.

Cassia Alata, winged cassia or tetter-plant, has long been

used as a domestic remedy in the tropics in almost all forms of skin diseases. It belongs, as its name implies, to the great cassia family, which includes senna, *leguminosæ*, and is found in the tropics almost all over the world, growing in damp marshy places, or along the banks of streams. Recent investigations show that its leaves, which are the part used in domestic medicine, owe their virtue to the very large percentage of chrysophanic acid which they contain. They have been found to be very valuable in the treatment of parasitic herpes—the fresh leaf being crumpled up and rubbed on the affected part. The application causes a cessation of pain, the vesicles dry up, the epidermis desquamates and in a short time the disease disappears. Dr. Couillebaut writes to the *Paris Médical* that he has found an acetic extract to possess the virtues of the fresh leaves and urges its use in the treatment of herpes and similar diseases.

Gelosin.—This mucilaginous principle, of which a note was made in the JOURNAL some time since, has recently been studied by Guérin, who contributes a note on the subject to the *Paris Médical*, for Oct. 9th. It is an amorphous, uncrystalizable, colorless substance, non-nitrogenous and very closely allied to lichenin and fucin (from the lichens and algæ respectively), as would naturally be expected when we remember its source (*Gelidium orneum*, a Japanese alga). It takes up and jellifies 550 times its volume of water, making a very firm, almost solid, transparent mass. To understand what this means, imagine a substance one cubic inch of which, dropped into a vessel of water six and one third inches cube, would render it a solid mass! Any medication soluble in water can be introduced into the liquid while still hot, and will be found evenly distributed throughout the jelly after cooling. Neither acids nor alkalies seem to destroy the jellifying power, and quite a large amount of glycerin may be added without apparently affecting it. It is easy to see what a role gelosin is destined to play, not only in medicine and pharmacy, but in the arts and economies of life.

Lobelia in the Asthma of Infancy.—Professor Moncorvo, of Rio de Janeiro, highly extols the tincture of *lobelia inflata* in the asthmas of childhood. He remarks (*Annales del Circulo Medico Argentino*) that to get its best effects it must be used in high doses, viz: from 4 to 8 grammes (from 1 to 2 drams) ac-

ording to the age of the infant. This dose seems indeed "high," and if the tincture be of the officinal strength would, in the great majority of instances, produce almost immediate emesis of a violent character. In the old "Thompsonian" school of medicine, which was popular thirty-five or forty years ago. lobelia held a high place in the *armamen'arium medicum*, and was accredited with extraordinary virtues in asthma. Dr. Cutler, of Boston, wrote a treatise on the uses of lobelia and introduced the medicine into regular practice. Like a good many other good remedies it has simply been forgotten. The dose mentioned by Dr. Moncorvo is a full one for adults. Lobelia beside being emetic is powerfully narcotic, and must be exhibited with care.

PHYSIOLOGICAL AND PATHOLOGICAL NOTES.

Albuminoids in the Urine.—M. Henocque has found the cupric sulphate is a most delicate reagent for albuminoids in urinary examinations. A few drops of a saturated solution of the copper salt, added to the urine, and the latter slightly heated, produce a marked violet red, which is easily distinguished even when very minute traces of the albuminoids are present. The value of this test lies not only in its delicacy but in the ease with which it can be applied clinically.

Animal Idiosyncracies.—Those engaged in physiological research by experiments upon living animals have hitherto, as a general thing, assumed that individual idiosyncrasy might be disregarded as a possible factor in the results attained,—that what happened, for instance, to one frog or rabbit, under given circumstances, would happen to any and all rabbits and frogs under similar conditions. That this is not the fact is abundantly proven, however. Very recently Dr. Brown-Sequard found a rabbit in which he could induce an attack of epilepsy by the slightest possible prick on the spinal marrow. Section of the marrow or this rabbit, instead of producing the well-known kicking movement, brought on general convulsions.

The Virus of Tuberculosis and of Scrofula.—M. Arloing, whose very complete experiments have demonstrated that while

pulmonary tuberculosis readily affects rabbits and guinea-pigs, true ganglionic scrofulosis will not attack the rabbit, made a supplementary report on this subject to the *Académie des Sciences* at the séance of Sept. 27th. He had endeavored in his later experiments to augment the virulence of the scrofulous infection to a point which would enable it to infect both rabbits and guinea-pigs. The passage of the virus, however, through two successive generations of guinea-pigs did not seem to modify its effects on the rabbit, which so far as he was able to note, were entirely negative. With true tuberculous virus, in its attenuated forms (such as are encountered in local or surgical tuberculoses), the case was different. Its passage through the organism of the guinea-pig augmented it in the most remarkable manner. While this fact is another strong link in the chain of evidence that the two viruses (i. e., of tuberculosis and of scrofula) are essentially different, it by no means proves that they may not be due to one and the same cause.

Ozæna and Rhinitis Fœtida.—Dr. de Campos Sales gives, in the *Revista Clinica*, the following points of differential diagnosis between true ozæna and fœtid rhinitis: True ozæna is a congenital affection, independent of the presence of ulcerations in the nasal fossæ. It is characterized by a congenital atrophy of the inferior turbinated bones which increases the size of the cavity of the nasal fossæ, and thus permits a stagnation and consequent alteration of the mucosities. It is this alteration, caused by the presence of a microscopical organism (*diplococcus*) in great numbers, which gives rise to the bad odor. In chronic symptomatic rhinites fœtidity is relatively rare, and when it exists is almost always found to accompany ulcerations of the mucous membrane or skeleton of the nose. Neither the age of the patient nor the conformation of the nasal fossæ seems to have any particular connection with this fœtidity, which is almost always transitory. It is, of course, possible for lesions to parts adjacent to the fossæ to cause fœtidity. In the treatment of ozæna, Dr. de Campos Sales recommends the use of antiseptic lavements, tampons of iodated wadding placed adjacent to the inferior turbinated, and in certain cases, cauterization with the galvano-cautery.

The Tolerance of Opium exhibited by very young children in certain conditions has frequently been commented upon. The

latest reported cases in point come, one from Winnipeg (Manitoba) and the other from Berlin. In the first instance a hydrocephalic infant of four and a half months, took a half grain of morphine sulphate daily, not only without harm but with apparent benefit. The case is reported in the *N. Y. Medical Record*. In the second instance (reported by Dr. Lévantiner in the *Berliner Klinische Wochenschrift*) hypodermic injections of morphine of from one and a quarter to three milligrams each (from one fiftieth to one twentieth of a grain), were given to an infant of four months, suffering with convulsions. The injections were repeated until five doses, of one twentieth of a grain each, were given in the course of 24 hours. The infant made a good recovery, and was apparently none the worse for the immense amount of morphine it had taken. Two hypotheses suggest themselves as possible reasons for the tolerance displayed in these and similar instances. The first is the well-known fact that adults in great agony can take with impunity, doses of morphine which under normal conditions would cause grave intoxication or even lethal effects. It is probable that the same phenomenon occurs in infancy, and that the toxic effects of the drug are, in cases like those above reported, counteracted by the nervous exaltation of pain. The second hypothesis is hereditary morphinism, a very marked case of which the writer once saw. A woman, the wife of a saloon keeper, had been a 'morphine eater' for years and was consuming from 35 to 40 grains of the drug daily when she became pregnant, and was finally delivered of a living child—the oldest, oddest, most wrinkled and yellow piece of infant humanity the writer ever saw. The mother had no milk and the infant was given to a wet nurse. It cried constantly, a puling, fretful, cat-like cry, that was most pitiful to listen to. Nothing could quiet it until morphine was given, when it went into a natural sleep and slept several hours. After this, during the balance of its life, it slept only when under the influence of morphine. It died a few days after birth from inanition.

The Active Principles of Ergot.—Kobert, of Strasburg, has published in the *Archiv fuer experimentelle Pathologie und Pharmakologie*, a full and valuable study of ergot of rye. First separating from the drug its different extractives, he proceeded to study each of these separately. The active principles seem to be three in number, viz; ergotinic acid, sphecelinic acid, and cor-

nutine. Administered by the mouth to frogs, ergotinic acid was found to be absolutely without effect, but when injected subcutaneously it acted as a narcotic, causing death by paralysis of reflex action which arrested respiration. An investigation showed that the negative effects in the first instance are due to the fact that the acid, being a glucoside, is converted into an inert substance by the gastric fluids. Ergotinic acid has no effect upon the uterus of warm-blooded animals.

Sphacelinic acid proved to be a much more interesting substance. When administered to guinea pigs, chickens and certain other animals, it produced gangrene and death. Administered in small doses to dogs it produces almost immediate emesis, and being itself returned with the vomit has no subsequent effect. When the doses are increased beyond a certain point death from asphyxia is the result. In these cases necropsy reveals inflammation of the digestive glands, the glands of Peyer, particularly, which have the appearance found in death from typhoid. The author explains the fact that gangrene is not a sequel when sphacelinic acid is administered to certain animals, by the statement that its action upon the vaso-motor center in these cases is not strong and is too evanescent to produce the effect in question. It is to the effect of sphacelinic acid on the vaso-motor center that the author attributes the value of ergot as an uterine medication.

Cornutine is an alkaloid. In warm-blooded animals it produces convulsions similar to those of epilepsy, accompanied by irregular contractions of the uterus. Gangrene was not noted as an effect in any of the experiments with this agent.

These experiments are very valuable and make clear much that was formerly not at all, or but little understood. It explains how in epidemics of ergotism among rye-eating peoples (notably in Southern Russia), there has been such a wide divergence in the symptoms and phenomena recorded. It is easy to see for instance, that ergot rich in sphacelinic acid should produce gangrene as the principal morbid phenomenon, while in the same manner, that rich in cornutine, but comparatively poor in the acid, should be followed by convulsions and epileptiform phenomena.

OBSTETRICS AND DISEASES OF WOMEN AND CHILDREN.

Improvised Female Catheters.—A writer in the *Medical World* tells of a patient of his, a woman, who being troubled with retention of urine used a wheat straw as an improvised catheter and relieved herself. The correspondent asks if others have seen similar cases. We remember a negro granny or midwife, who habitually used a joint of switch cane for the purpose. Another, who had considerable reputation as a "hoo-doo", used a rooster's spur as a catheter. It was about two and a half inches long, a half inch in diameter at the base and tapered to nearly a point as the apex. The core had been removed and the spur resembled nothing so much as the horn of a diminutive lilliputian steer. Finally, the writer, himself, has more than once used a goose-quill for the purpose.

Treatment of Puerperal Maladies.—Runge's treatment epitomized, may be said to consist of "alcohol in high doses, abundant alimentation, baths and the absolute rejection of antithermics." The quantity of alcohol ingested should be considerable. The baths should be of a temperature from 72° to 75° F. Antithermics, no doubt, may and do cause a reduction of temperature; but they do so at the expense of the digestive faculties, which in a battle of the organism against pathogenic germs is a grave mistake.

The City Board of Health is very rigid in its regulations and during the past month a few physicians were arraigned before the police court for neglecting to give proper notification of cases of diphtheria, which they were treating.

One of the absorbing topics of the St. Louis Medical Society at present is, who will be the officers for 1887? Quite a number of candidates are already in the field for the position of president.

Practical Notes.

Treatment of Syncope.—Persons in a state of syncope from heart troubles may, according to Brown-Sequard, (*Bulletin de Thérapeutique*), frequently be restored to consciousness by simply reversing them—seizing them by the legs and standing them on their heads. A strong galvanic current applied to the neighborhood of the trachea sometimes is successful where all else has failed. Intermittent pressure over the heart is also a means that sometimes succeeds. Finally, vigorous pinching or pricking the skin in front of the trachea is sometimes successfully resorted to.

F. L. J.

Pruritus is at all times a disagreeable symptom, especially when scratching does not allay it. As a rule, there is always some cause which produces it, and all local treatment is futile until that cause is removed. Of late, I have seen a number of cases in which the ingestion of morphia produced this symptom. In two of the patients, women, the itching was so intense, that they scratched themselves full of excoriations whilst under the narcotic influence of the drug. There does not seem to be any site of predilection for the pruritus, unless it be the flexor surfaces, perhaps; but, it may be because they are more easily reached by the patient.

O-D.

Tannate of Mercury is not more generally in use as a mercurial in the treatment of syphilis, because its chemical properties are not sufficiently known by the profession in general. I have found it to be an excellent preparation, and invaluable in certain cases. It has the peculiarity of being insoluble in acid solutions, but dissolves rapidly in those which are alkaline. Hence, in those cases where we find irritability of the stomach, in consequence of the administration of mercury, or in those cases where the stomach will not bear the ordinary salts of that metal, the tannate will be indicated and will serve its purpose well. Anorexia, nausea, etc., disappear, the patient regains his appetite, and the tannate of mercury is dissolved in and absorbed by the intestines. Of course, this drug should be administered in pill form, in doses ranging from one to one and a half grains three times a day.

O-D.

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Book Reviews.

A Laboratory Guide in Urinalysis and Toxicology. By R. A. WITTHAUS, A. M., M. D. 8vo, pp. 75. New York: William Wood & Co., 1886.

This little book is a convenient guide to the manipulations and laboratory work in the examination of urines and in the detection of poisons. It is written in a plain and simple style, and condensed to the very limit of brevity, as may be imagined, when we say of its 75 pages, printed in leaded long primer, fully one-half the space is occupied by illustrations. For the practitioner, who is content, in the great majority of cases, with the barest outline of examinations of this sort, and for the student who wishes an *aide-memoire* to the laboratory work, it will be found a valuable assistant. In the chapter devoted to quantitative estimations the results are generally given approximately, reference being made to fuller works when greater accuracy is demanded. The illustrations are clear and good. One side of each leaf is left blank for annotations and additions. Its size and method of binding make it very convenient for carrying in the pocket—which is a desideratum to students.

Analysis of the Urine, With Special Reference to Diseases of the Genito-Urinary Organs. By K. B. HOFMAN and R. UTZMANN. Translated by T. BARTON BRUNE, A. M., M. D., and H. HOLBROOK CURTIS, Ph. B., M. D. 8vo. pp. 310; 8 colored plates. New York: D. Appleton & Co., 1886. St. Louis: Jno. L. Boland, 610 Washington Ave. Price, \$2.00.

The preface of the translators of this little work states its nature and object in a very concise manner, viz: it is a book of practical hints in the examination of urine, and in the diagnosis of those genito-urinary troubles, the nature of which may be determined by such examination. It does not profess to be either

an elaborate treatise on the chemistry of urine, or an exhaustive essay on the genito-urinary organs, but claims to contain all that is necessary for the guidance of the student and the practising physician. The opening chapters give a very lucid account of the histology of the genito-urinary tract, and of the physiology of the excretion of urine. The chapter devoted to normal urine and its constituents is very full and clear, as is also that on pathological urines. Perhaps the most valuable portion of the whole work are the two chapters devoted to general diagnosis based upon the condition of the urine, and to the diagnosis of disorders of the genito-urinary organs. The whole of this portion of the work is most practical and excellent.

The plates—lithographs, eight in number, are not to be found in the original German edition, but have been borrowed from the "Atlas of physiological and pathological urinary deposits," by the same authors. Their value is considerably detracted from by the failure to state the magnifying powers used, and in some respects the drawing is faulty. The spermatozoa, for instance, figured at A (plate VI), are far from correct. The heads are represented as quite oval, and in every instance are much too large for the length of the caudal appendage. Again, no student educating himself (and the work is professedly intended for such), would ever be able to recognize the cylindrical deposits from Fig. A, in plate VII. These are, however, minor defects, and aside from them, the book is a valuable one, and we cordially recommend it to those in quest of a practical guide to urinary analysis.

How we Treat Wounds To-Day. A Treatise on the Subject of Antiseptic Surgery which can be understood by Beginners. By ROBERT T. MORRIS, M. D. Second Edition. 12mo. pp. 165. New York and London: G. P. Putnam's Sons—1886. Price, \$1.00.

This little work is one devoted to a short and terse description of antiseptic surgery as applied to the treatment of various kinds of wounds. The style adopted is one which is quite in vogue now-a-days—that of stating facts in the form of aphorisms. Not only all the various forms of wounds and their treatment are considered, but also irrigators, dressings, ligatures, drains, protectives and all the various paraphernalia employed in antiseptic surgery. Dr. Morris seems to regard the bichloride of mercury as

the best antiseptic, although giving full credit to the others.

This edition is a reproduction of the first, with the exception of Tait's success in abdominal surgery. As is well-known, Mr. Tait has had phenomenal success as a laparotomist, and yet he has proclaimed himself an opponent to the use of antiseptics in abdominal surgery. The explanation of Dr. Morris does not seem to be entirely satisfactory when viewed by the light of the bacterial doctrine, but is perhaps as good a one as could reasonably be expected.

On the whole, this little book is one which will prove valuable to beginners, and to those who have not full opportunities of witnessing important operations and their after-treatment. Moreover, diagrams are given, illustrating, in a very clear manner, the various coverings, etc., which go to make a perfectly antiseptic dressing. In addition to this, the after-treatment of wounds is given, and although the active surgeon will meet many familiar things, he will find that all the hints given are valuable ones, and whether he believe in antiseptics or not, he will find that the author has stated a large number of wholesome facts. The author wisely leaves the deductions to his readers.

Bright's Disease and Allied Affections of the Kidneys.

By CHARLES W. PURDY, M. D., 8vo, pp. 288. With 18 illustrations. Philadelphia: Lea Brothers & Co. St. Louis: J. L. Boland, 1886. Cloth, \$2.00.

In this work the author has made a study of the chief diseases of the kidneys associated with albuminuria. The initial chapter is devoted to albuminuria, true and false, its significance, the tests to be employed for its detection, and the hygiene and treatment appropriate in all cases. Uræmia is next considered, whilst the succeeding chapters are devoted to acute and chronic nephritis. Cirrhosis of the kidney receives attention, but what we wish more particularly to commend, are the studies made in regard to scarlatinal and puerperal nephritis. The two concluding chapters are devoted to lardaceous degeneration and cyanotic induration of the kidneys.

What we desire to note in this book is the evidence of original work shown in the descriptions of the morbid anatomy and microscopical appearances in the diseases treated of. Symptomatology is well considered, and a large amount of attention is

paid to treatment. Diagnosis receives a largeshare of attention, and taken altogether, the book is a useful one to consult. Moreover, the author has struck out into a new path. He regards the anatomical divisions of nephritis heretofore employed, as misleading, and regards it as a better plan to employ a name which implies only the type of the disease rather than one restrictive in its signification and implying only a part of the morbid processes and pathological changes, and which is therefore liable to be misleading to the student.

A Manual of Animal Vaccination, preceded by Considerations on Vaccination in general. By E. WARLOMONT, M. D. Translated and edited by ARTHUR J. HARRIES, M. D. Philadelphia, John Wyeth & Brother, 1886.

This little work, generously published and distributed to the medical profession, free of cost, by the great manufacturing chemists, Wyeth Brothers, of Philadelphia, is a perfect mine of information on the subject of animal vaccination. The author, Dr. Warlomont, is the founder of the State Vaccine Institute of Belgium, and director of the *Institut Vaccinal de Belgique*, an authority on all that pertains to the subject. We sincerely hope that the profession will not treat the book as we are too apt to treat those things that cost nothing, and will give it a place in their libraries, of which it is well worthy, not only in matter but in style of publication. etc. Those of our readers who have not received a copy can obtain one by sending to John Wyeth & Brother, Philadelphia.

A Physician in Trouble.—Dr. F. W. Wesseler, an old and well-known practitioner, failed to report a case of diphtheria to the Board of Health, as required by City Ordinance (Sec. 5; Art. 17), and has been proceeded against by the Health Commissioner. The question of a physician's duty to his patient as opposed to his duties to the public, under laws like the one referred to, is a difficult one to solve. It is attracting considerable attention in France at the present moment, where under the title "*le secret professionnel*" it is being vigorously discussed in the journals. We sincerely hope that Dr. Wesseler may come out of the matter unscathed.

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Books and Pamphlets Received.

Meconeuropathia. By C. H. Hughes, M. D. Reprint from *The Alienist and Neurologist*, July, 1886.

Annual Report of the Commissioner of Pensions to the Secretary of the Interior, for the year ending June 30th, 1886.

The Amblyopia of Squinting Eyes;—Is it a cause or consequence of squint? By Samuel Theobald, M. D. Reprint from *Medical News*.

Das Oleum Santali ostindic. als Anti-blennorrhagicum. Von Dr. LETZEL. Separat-Abdruck aus der *All. Med. Central Zeitung*, No. 76 u. 78, 1886.

The Surgery of the Pancreas, as based upon experiments and clinical researches. By N. Senn, M. D. Reprint from the *Transactions of the American Surgical Association*, 1886.

The Curette, as a diagnostic and therapeutic agent in Gynecology and Obstetrics. By H. Bernard Browne, M. D. Reprint from *Transactions of the Medical and Surgical Faculty of the State of Maryland*.

Outlines of the Pathology and Treatment of Syphilis and Allied Venereal Diseases. By HERMANN VON ZEISSL, M. D. Second Edition, revised by MAXIMILIAN VON ZEISSL, M. D. Authorized Edition. translated, with notes, by H. RAPHAEL, M. D. 8vo, pp. 402. New York: D. Appleton & Co., 1886.

A Treatise on the Principles and Practice of Medicine; designed for the use of Practitioners and Students of Medicine. By AUSTIN FLINT, M. D., LL. D. Sixth Edition, revised and largely re-written by the author, assisted by WILLIAM H. WELSH, M. D., and AUSTIN FLINT, M. D., LL. D. 8vo., pp. 1160. [Phila-

delphia: Lea Brothers & Co. 1886. Price, cloth, \$5.50; calf, \$6.50; half Russia, \$7.00.

The Physicians' Visiting List for 1887. Philadelphia, P. Blackiston, Son & Co. Thirty-sixth annual edition, containing almanac for the year, list of poisons and antidotes, the metric system and tables for conversion, dose table (brought down to the latest and newest remedies), tests for urine, and notices of some of the latest additions to the pharmacopœia. Bound in strong leather. Price, from one to two dollars, according to size.

Melange.

Story of a Freak.—Under this title the Philadelphia Correspondent of the *Globe Democrat* of this city gives one of the most remarkable histories of the influence of ante-natal impressions that we have ever read. It is too long to insert here, but the gist of it is that Antoine Bellini and his wife, show people, impressed with the idea that a human monstrosity of more frightful appearance than any hitherto exhibited would be a mine of wealth, deliberately set themselves to work to manufacture one by what might be termed physiological and psychological methods. The man first mutilated his hands by eroding the fingers with oil of vitriol, undergoing most frightful torments while doing so. He caused his pregnant wife to look upon his sufferings and also to see various other terrible sights, but the child born of this pregnancy was in every way natural. The father then reasoned that the miscarriage of his infamous design was due to the knowledge and acquiescence on the part of the wife, and that to succeed he must produce mental and physical shock in her while she was in a pregnant condition. He therefore pretended to give up the idea and persuaded her to do the same thing, and after waiting for a considerable time he caused her to be brought un-

expectedly and suddenly in contact with the most horrible and loathsome objects. The result was that she was delivered at term of a most revolting and hideous monstrosity combining all the fearful features which the unnatural parents had desired so ardently in the woman's first pregnancy.

The story is vouched for by Doctors A. S. Brown and Geo. M. Batton, of the University of Pennsylvania, and will no doubt be contributed in full to some medical journal. If there be no law to reach these infamous parents—and it is likely there is not, since such depravity was hitherto undreamed of in civilized America, we hope the matter will be brought to the attention of the legislatures of every state in the Union and such laws made as will prevent the example from having imitators. A preliminary step in this direction should be the absolute suppression of the exhibition of such "freaks," for the multiplication of which by ways not so diabolically scientific, yet devilishly cruel, the dime museums and circus side-shows are directly responsible, by affording a market for them.

"The Five Best Medical Journals."—Of all the cheeky and ridiculous schemes of self-glorification and mutual back-scratching, that recently adopted by a little ring of eastern medical journals caps the climax! A publication in Philadelphia and one or more in New York, sent circulars to their subscribers asking each recipient to indicate the five medical journals in the United States that are, in his opinion, the best. The answers were (presumably) returned, a tabulation of them made, and the result is now being heralded by the senders as the impartial judgment of the country. Of course, each sender of the circulars was mentioned among the five, and boasts accordingly. As a real test of value or popularity, such a verdict has no weight whatever. To give it such would be to presume that the parties who acted as jurors had access to, and habitually read, all of the medical journals in the country, and that each was capable of instituting a comparison upon the relative merits of the several scores of such publications—a supposition which is so utterly absurd that it is strange that any man having sense enough to write a paragraph could for a moment entertain it. The time was when the East—that is the Atlantic sea-board cities from Philadelphia northward, furnished pretty nearly all the reading matter indulged in by American physicians. By the

natural process of development this order of things has been changed and the intellectual sceptre, so long swayed by the Wise Men of the East, has passed or is rapidly passing from their hand. Some of the journals, the really great ones, have long since recognized this fact and made the best of it. They have, of course, not willingly seen their outlying territory usurped, nor have they submitted to the occupation without a struggle. But these journals undertook to restore their tottering suzerainty by intellectual methods. To this no one has a right to object, and least of all those who challenged the combat. Such a struggle for supremacy can result only in making better journals, and in whatever way it terminate the profession at large must be the gainers. But such methods as the one referred to above, only make plain the desperation of the class that see the green fields of the West and South, so long their particular pasture grounds being occupied by others.

"*Impius haec culta novalia habebit, barbarus has segetes?*" they tearfully ask each other,—"*Not if we can help it!*"

Influence of the Emotions on the General Health.—In a most interesting and valuable thesis, recently published by M. Alphandéry and entitled "*Moral Therapeutics*," the author has recalled several historical examples of the influence of the emotions upon health and even life itself. Joy, he has shown, may not only occasion deep modifications of the system, but may even cause death. He cites, in proof of this, the case of Chilo, the Spartan, Ephorus of Lacedæmon, ranked among the Seven Sages of Greece, who is said to have died from joy while embracing his son, who had won the great prize in the Olympian Games (B. C. 556). Aulus Gellius tells us that Diagoras of Rhodes died in the same manner and from the same cause. The consul Juventius Thalma, colleague of Tiberius Gracchus, as narrated by Valerius Maximus, died of joy on reading the announcement that the Senate had decreed him a triumph. Sophocles, after reaching extreme age, wrote a tragedy which he read before a public course. The crowd remained silent for a moment, and then proclaimed him, with one voice, Tragic Victor. The joy was too great for the old man and he fell forwards, dead. To come to more modern times, Pope Leo X, we are told by Montaigne, upon hearing of the capture of Milan (which he had long desired) entered into such transports of joy that he fell into a fever which killed him.

Sudden grief, a great disappointment, anger or chagrin may produce similarly disastrous results, history again furnishing numerous well-known examples.

Isocrates died suddenly of grief on hearing of the battle of Cheronea. Terence died of chagrin from the loss by shipwreck of a large lot (108) of comedies translated by him from Menander, and the manuscript of which he had sent by sea to Rome. Horace survived the death of his friend and benefactor Mecænas, but a few days—"died of a broken heart."

Sibouyah, an Arabian grammarian of the 8th century, died of mortification because he was vanquished in a discussion held before Haroun al Raschid.

Andreas Vesalius died of remorse caused by having commenced an autopsy on a man whose heart he found to be still beating.

Pope Clement IX died of chagrin at the loss of the Island of Candia.

Amaury, accused of heretical tendencies, in 1209, died of remorse because he had disavowed his real opinions when questioned upon them. Ximenes, in 1517, died of worry over approaching disgrace. Cheke died (in 1557) like Amaury, of sorrow at having pretended to be converted from his real religious views. Valentia, the philosopher, having been accused by the Pope of falsifying a passage in Saint Augustin's writings, died of chagrin. The poet Sarazin (1654) died of shame for having submitted to a blow from Prince Conti.

We need not, however, go to history for instances of this sort. There is scarcely a physician of middle age who cannot recall at least one instance coming under his own observation, where death was due solely to the emotions. The phrase "died of a broken heart" is no doubt often used carelessly or misapplied, but that sorrow, remorse, shame and worry drag many a man and woman to premature graves is as true as that cholera, or diphtheria does so; though not, of course, to the same extent, so far as numbers go.

Local Medical Matters.

Diphtheria.—There were 106 deaths from diphtheria during October.

City Mortality.—For the month ending Oct. 31st, the total deaths from all causes within the city numbered 821.

Death from Surgical Operation.—There was one death resulting from surgical operation during October.

Diphtheria and Wells.—The Health Commissioner reports that he can trace no connection between the spread of diphtheria and the use of wells throughout the city.

The dead-house of the Female Hospital is said to be but little better than a shed. It would be well if the city authorities were to take cognizance of the fact and erect a suitable building for the purpose.

Particular about what he uses.—A genito-urinary specialist of this city has a tumbler in his office, labelled "for drinking purposes only." As the other glasses are not labelled one wonders what end they really serve.

The attendance of medical students in this city at present is about up to the usual number. The increase in the number of colleges by one this season, has perhaps contributed somewhat to decrease the number in the other and older institutions; but, being divided, the loss is scarcely noticeable.

Painful Accident.—On Nov. 9th, Dr. Geo. J. Bernays, an old and well-known practitioner of this city, was thrown from his buggy, his head striking the curb. A lacerated, severe wound of the scalp, denuding a large portion of the skull, was the result. At last accounts he was doing well and in a fair way to recover.

Dr. Emil Stoessel, the manager of the *New Yorker Medizinische Presse*, spent a few days in the city during the month of November. He tells us that the experiment of printing a German medical journal in this country is a success. From the copies of the *Presse* that we have seen, we can say that it certainly deserves success.

An Elevator in the City Hospital is an absolute necessity and is the more needful now that winter is upon us. As things are now, patients must be carried up and down stairs, along halls, etc., upon stretchers and it is anything but pleasant to both the carriers and the carried. An elevator could be built that would cost but little and which would add a great deal to the comfort of the patients and, at the same time, relieve the nurses of disagreeable labor.

Fire at the Female Hospital.—On the morning of Nov. 6th, a fire was discovered under the shingles of the negro quarters of the Female Hospital. Quite an alarm was caused, and the patients, books, papers, etc., were removed from the main

building in anticipation of a disastrous conflagration. The local fire apparatus kept the flames in check until Department Engine 21 arrived on the scene and put them out. The upper story of the building was, however, totally destroyed.

In Questionable Company.—In the advertising columns of a quasi medical publication, formerly of Washington but now of Chicago, and which has for months past been denounced by the *Herald* of Philadelphia, as a fraud of the worst description, we find the advertisement of a local medical college in good standing. There is but one other advertisement of the sort in this journal, but the absence is more than made up for by advertisements of quacks and frauds of the vilest description. To say the very least, our home school is in very questionable company. *Verbum sat sapientis.*

Diphtheria.—The reports concerning the prevalence of this disease in St. Louis, have as usual, been grossly exaggerated abroad. We venture to say that nine-tenths of the cases of so-called 'diphtheria' of which one hears, not only in St. Louis, but elsewhere, are simply follicular tonsillitis. We recently heard one young M. D., the down upon whose lip resembles the bloom of a peach, tell a young lady in an Olive Street car, that he had attended thirty-six cases of diphtheria during the epidemic and *saved them all*. True diphtheria is a disease that kills—not every time, but in such a large proportion of cases that the physician who knows his business has a dread and respect for it scarcely second to that accorded to cholera.

The Wholesomeness of pure Candies.—It has been but a very few years since physicians were united, almost as one man, in the condemnation of the use of candies and confections, especially those made attractive to the eye by brilliant coloring. Chemistry has, however, been at work among the confectioners, as well as in the other branches of the sugar industries, and has converted their trade into an art. It has cheapened and improved the processes of clarification and crystalization of sugar; it has shown how pure fruit juices and flavors may be preserved almost indefinitely, or imitated by artificial products as harmless as those from the laboratory of nature; it has supplanted the poisonous metallic and anilin dyes with colors quite as brilliant and beautiful, but innocuous, even when used in large quantities;—in short it has worked a complete revolution in the confectioner's art, and made beautiful candies not only as cheap but as wholesome as the homeliest of old-time taffy. Physicians who have paid any attention to the matter have noted this change in Saint Louis, especially, where there has been, and is, great rivalry in the line of fine and pure candies. One of the most prominent local manufacturers (W. H. Fraser, 602 Olive St.) keeps a standing advertisement of one thousand dollars reward to any person who will discover any impurities or deleterious substances in his candies.

Gastrotomy Extraordinary; Recovery of the patient.—

On Wednesday evening, Nov. 17th, 1886, Dr. A. C. Bernays was called suddenly, while at the theatre, by Dr. Hugo Kinner of this city, to see a man who had swallowed a case-knife. The patient, Joseph Hoffmann, is a tailor and resides at No. 1207 S. Broadway. On this evening, after having freely partaken of beer, he was amusing his family by various sleight-of-hand tricks and intended to close his performance by the *chef d'oeuvre* of sword swallowing. Not having a sword at hand he picked up an ordinary table-knife, 9½ inches in length, and putting the handle down his throat, with neck fully extended and head thrown backward, pushed it down into the œsophagus. The knife escaped the control of the juggler and was swallowed, lodging transversely in the stomach, as the subsequent operation proved. As is well known, Dr. Bernays is never seen without his satchel, and this accounts for the promptness with which he was ready for the emergency. Thirty minutes after being notified, the incision in the linea alba was made and five minutes later the knife had been withdrawn from the stomach, through an incision not exceeding half an inch in length, on the anterior surface of the stomach, about two and a half inches from the pylorus. This opening was closed by means of the Czerny-Lembert suture, five interrupted Czerny stitches with the finest catgut, and these were buried by eight Lembert sutures made with the finest silk. The stomach was now slipped back into its normal position and the external incision closed after the usual method as practised by Spencer Wells. The patient was forbidden all kinds of food, the attending physician, Dr. Kinner, insisting upon limiting him to a teaspoonful of water every hour for the first four days. He was given large nutrient enemata and morphine. Seven days after the operation, the patient was sitting up, the abdominal sutures having been removed on the fifth day, the union by first intention having taken place along the whole incision. The points of interest in this case are: 1st, Performing gastrotomy for the removal of a foreign body *without* establishing an artificial fistula; 2nd, the fact that this case is unique, no other being on record of a man swallowing a case-knife*; 3rd, the use of the Czerny-Lembert suture on the stomach. The patient at last accounts was out of danger and doing well. He is sitting up and his temperature and pulse are normal.

*—NOTE BY THE EDITORS.—There are on record but four cases of operation for the removal of swallowed case-knives, in each of which the operation for the removal was performed after adhesions had formed between the stomach and the abdominal wall. An account of another case was published by Harknocht in "Alt und Neues Preussen," 1684, in which a table-knife 18 cm. long by 1.5 cm. wide was removed from the stomach by Daniel Schwabe, of Königsberg, in 1635. The incision in the stomach "snapped shut" and the viscus was dropped back without being sutured. Five stitches were put into the abdominal incision and the case recovered. The account of this case, however, is obscure and not well authenticated.

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